

## SEARCH REQUEST FORM

Examiner # (Mandatory): \_\_\_\_\_ Requester's Full Name: UYEN LEArt Unit 2771 Location (Bldg/Room#): PK2 8A12 Phone (circle 305) 306 308) 4134Serial Number: 09/004,027 Results Format Preferred (circle): PAPER DISK E-MAILTitle of Invention METHOD FOR NODE RANKING IN A LINKED DATABASEInventors (please provide full names): LAWRENCE PAGEEarliest Priority Date: 10 JAN 1997

Keywords (include any known synonyms registry numbers, explanation of initialisms):

- IMPORTANCE RANK OF N LINKED NODES
- WEIGHTED SUM OF RANKS OF BACKLINK NODES

requested  
2 abstracts from search  
from STC  
12 July 99

## Search Topic:

Please write detailed statement of the search topic, and the concept of the invention. Describe, as specifically as possible the subject matter to be searched. Define any terms that may have a special meaning. Give examples of relevant citations, authors, etc., if known. You may include a copy of the abstract and the broadcast or most relevant claim(s).

SEE ABSTRACT & CLAIMS ATTACHED

06-07-1999 A07:46

## STAFF USE ONLY

Searcher: Joyce BakerSearcher Phone #: 304-7790Searcher Location: ELC 270Date Picked Up: 6/9/99Date Completed: 6/10/99Classical Prep Time: 1.0Terminal Time: 2.10Number of Databases: 58

## Type of Search

☐ N.A. Sequence☐ A.A. Sequence☐ Structure (#)☒ Bibliographic☐ Litigation1☐ Fulltext☐ Procurement☐ Other

## Vendors (include cost where applicable)

☐ STN☐ Questel/Orbit☐ Lexis/Nexis☐ WWW/Internet☐ In-house sequence systems (list)☒ Dialog☒ Dr. Link☐ Westlaw☐ Other (specify)

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\*  
\* Cover Sheet  
\*  
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\*\*\* 09/004,827 \*\*\*

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\*  
\* Prepared for: Examiner Uyen Le  
\*  
\* By : Joyce Baker  
\*  
\* Date : June 10, 1999  
\*  
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Attached are the search results for your request. Please review and let me know if you want to try another approach.

Thanks,  
Joyce  
308-7796

File 351:DERWENT WPI 1963-1999/UD=9922;UP=9922;UM=9922

(c)1999 Derwent Info Ltd

File 347:JAPIO Oct 1976-1999/Feb.(UPDATED 990603)

(c) 1999 JPO & JAPIO

File 344:Chinese Patents ABS Apr 1985-1999/May

(c) 1999 European Patent Office

Set	Items	Description
S1	957911	CATEGORI? OR RANK OR PRIORIT? OR RATE OR HIERARCH? OR ORDER OR CLASSIF?
S2	1489689	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	2997738	LINK? OR CONNECT? OR JOIN OR COMBINE? OR BACK()LINK? OR BA- CKLINK?
S4	52275	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR LIBRARY
S5	90136	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	82605	CITATION? OR DOCUMENT? OR REPORT? ?
S7	636	WEIGHTED(7N)SUM
S8	3444	(S1(7N)S2)(10N)S3
S9	49	S8(S)S5
S10	1	S9(S)S4
S11	1	S9 AND S4
S12	0	NODE?(S)RANK?(S)LINK?(S)DATABASE?
S13	1	NODE? AND RANK? AND LINK? AND DATABASE?

13/3,K/1 (Item 1 from file: 351)  
DIALOG(R)File 351:DERWENT WPI  
(c)1999 Derwent Info Ltd. All rts. reserv.

011154935 \*\*Image available\*\*  
WPI Acc No: 97-132859/199712  
XRPX Acc No: N97-109640

**Computer booking system for booking individual ones of set of resources to users of resources - in which database creates pairs of data nodes for each booking and each data node has user field for specifying user for whom booking is scheduled**

Patent Assignee: BRITISH TELECOM PLC (BRTE )

Inventor: SKELLS M J D

Number of Countries: 071 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat	No	Kind	Date	Main IPC	Week
WO 9704408	A1	19970206	WO 96GB1590	A	19960701	G06F-017/30		199712 B
AU 9663126	A	19970218	AU 9663126	A	19960701	G06F-017/30		199723
EP 842476	A1	19980520	EP 96922141	A	19960701	G06F-017/30		199824
			WO 96GB1590	A	19960701			

Priority Applications (No Type Date): GB 9523206 A 19951113; EP 95305198 A 19950724

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
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WO 9704408	A1			
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Designated States (National): AL AM AT AU AZ BB BG BR BY CA CH CN CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN

Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG

AU 9663126	A	Based on	WO 9704408
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EP 842476	A1	Based on	WO 9704408
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Designated States (Regional): DE FR GB IT

Language, Pages: WO 9704408 (E, 30); EP 842476 (E)

**... in which database creates pairs of data nodes for each booking and each data node has user field for specifying user for whom booking is scheduled**

...Abstract (Basic): The computer booking system includes a unit for booking resources to users, each of which is arranged to create one or a pair of data **nodes** (50) for each booking. Each data **node** (50) is associated with an event relating to an individual booking and includes a time field for specifying the time at which the event is scheduled to occur. Each data **node** (50) is associated with the unit for specifying the event associated with the **node** .

...

...Each **node** is located in a single **linked** list, (time list) of **nodes** in which the **nodes** are arranged in order of their event times. Each **node** is also arranged in a respective one of a set of lists (value lists). In each value list the **nodes** are arranged in order of their event times, and the value lists are arranged in order of **rank** . The booking unit is arranged to locate each now **node** in the value list of the lowest possible **rank** .

...

...USE - Booking channels between two synchronous digital hierarchy multiplexers in telecommunications network, for e.g booking ports for communications **link** , or items hired by hire company

...Title Terms: **DATABASE** ;

File 351:DERWENT WPI 1963-1999/UD=9922;UP=9922;UM=9922

(c)1999 Derwent Info Ltd

File 347:JAPIO Oct 1976-1999/Feb. (UPDATED 990603)

(c) 1999 JPO & JAPIO

File 344:Chinese Patents ABS Apr 1985-1999/May

(c) 1999 European Patent Office

Set	Items	Description
S1	957911	CATEGORI? OR RANK OR PRIORIT? OR RATE OR HIERARCH? OR ORDER OR CLASSIF?
S2	1489689	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	2997738	LINK? OR CONNECT? OR JOIN OR COMBINE? OR BACK()LINK? OR BA- CKLINK?
S4	52275	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR LIBRARY
S5	90136	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	82605	CITATION? OR DOCUMENT? OR REPORT? ?
S7	636	WEIGHTED(7N)SUM
S8	3444	(S1(7N)S2) (10N)S3
S9	49	S8(S)S5
S10	1	S9(S)S4
S11	1	S9 AND S4
S12	0	NODE?(S)RANK?(S)LINK?(S)DATABASE?
S13	1	NODE? AND RANK? AND LINK? AND DATABASE?
S14	25	NODE? AND RANK? AND (LINK? OR BACKLINK? OR BACK()LINK?)
S15	24	S14 NOT S13

15/3,K/1 (Item 1 from file: 351)  
DIALOG(R)File 351:DERWENT WPI  
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012384231 \*\*Image available\*\*  
WPI Acc No: 99-190338/199916  
XRPX Acc No: N99-139243

**Telecommunications network with tree structure with three node layers  
having lowest and higher and highest level number of nodes**

Patent Assignee: KONINK KPN NV (NEPO )

Inventor: SAMSOM S M

Number of Countries: 082 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
WO 9909714	A1	19990225	WO 98EP5286	A	19980817	H04L-012/44	199916 B

Priority Applications (No Type Date): NL 971006797 A 19970819

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
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WO 9909714	A1			
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Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU  
CZ DE DK EE ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC LK LR  
LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM  
TR TT UA UG US UZ VN YU ZW

Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR  
IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW

Language, Pages: WO 9909714 (E, 22)

**Telecommunications network with tree structure with three node layers  
having lowest and higher and highest level number of nodes**

...Abstract (Basic): telecommunications network with tree structure in  
which the use of type addressing is possible in the event that a  
signaling message is sent from a **node** from a higher **ranked node**  
layer to a **node** from a lower **ranked node** layer. Has **node** (4, 5  
and 6) from 3rd level comprising transmitter for sending signaling  
message, and addressing mechanism for feeding to signaling message  
**node** designation of **node** (11 to 16) associated with message from 1st  
**node** layer, and type code which designates control function or **node**  
both of specific type for which signaling message is intended...

...USE - For providing a telecommunications network with **nodes** that are  
mutually coupled using communication **links** .

...

...telecommunications network with tree structure in which the use of type  
addressing is possible in the event that a signaling message is sent  
from a **node** from a higher **ranked node** layer to a **node** from a  
lower **ranked node** layer...

...**node** from 3rd level 4, 5 and 6...

...**node** associated with message from 1st **node** layer 11 to 16

...Title Terms: **NODE** ;

15/3,K/2 (Item 2 from file: 351)  
DIALOG(R)File 351:DERWENT WPI  
(c)1999 Derwent Info Ltd. All rts. reserv.

011176634 \*\*Image available\*\*  
WPI Acc No: 97-154559/199714  
XRPX Acc No: N97-127684

**Determining additional route in fully or partially meshed communication  
network - ascertaining whether node has higher or lower ranking node  
identity than that of neighbouring node so that all nodes are  
appropriately allocated to restoration routes**

Patent Assignee: BRITISH TELECOM PLC (BRTE )

Inventor: BROWN G N; CHNG R S K  
Number of Countries: 073 Number of Patents: 006  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
WO 9706644	A1	19970220	WO 96GB1913	A	19960806	H04Q-003/66	199714 B
AU 9666652	A	19970305	AU 9666652	A	19960806	H04Q-003/66	199726
NO 9800521	A	19980206	WO 96GB1913	A	19960806	H04Q-000/00	199821
			NO 98521	A	19980206		
EP 843942	A1	19980527	EP 96926491	A	19960806	H04Q-003/66	199825
			WO 96GB1913	A	19960806		
AU 695859	B	19980827	AU 9666652	A	19960806	H04Q-003/66	199846
MX 9706489	A1	19971101	MX 976489	A	19970826	H04Q-003/66	199902

Priority Applications (No Type Date): EP 95305493 A 19950807

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
WO 9706644	A1			

Designated States (National): AL AM AT AU AZ BB BG BR BY CA CH CN CU CZ  
DE DK EE ES FI GB GE HU IL IS JP KE KG KP KR KZ LK LR LS LT LU LV MD MG  
MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK TJ TM TR TT UA UG US UZ VN  
Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GR IE IT KE  
LS LU MC MW NL OA PT SD SE SZ UG

AU 9666652 A Based on WO 9706644

EP 843942 A1 Based on WO 9706644

Designated States (Regional): BE CH DE DK ES FI FR GB IT LI NL SE

AU 695859 B Previous Publ. AU 9666652

Based on WO 9706644

Language, Pages: WO 9706644 (E, 25); EP 843942 (E)

... **ascertaining whether node has higher or lower ranking node identity than that of neighbouring node so that all nodes are appropriately allocated to restoration routes**

...Abstract (Basic): The method involves sending a route finder signature from a **node** to a neighbouring **node** on a spare **link** of a span to the neighbouring **node**. The **links** of the span are **ranked**. On the basis of respective unique network **node** identities of the **node** and the neighbouring **node** it is determined whether the **node** has a lower or higher **ranking** relationship with respect to the neighbouring **node**

...

...If the **node** has a higher **ranking**, the route finder signature is sent to the neighbouring **node** on the lowest **ranking** of currently available spare **links** of the span. If the **node** has a lower **ranking**, the route finder signature is sent to the neighbouring **node** on the highest **ranking** of currently available spare **links** of the span...

...ADVANTAGE - Two **nodes** at opposite ends of span can independently allocate **links** from set of spare **links** in span for restoring failed routes, starting from highest **ranked** and lowest **ranked** spares, respectively. Avoids contention for spares

...Title Terms: **NODE** ;

15/3,K/3 (Item 3 from file: 351)  
DIALOG(R)File 351:DERWENT WPI  
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010992937 \*\*Image available\*\*  
WPI Acc No: 96-489886/199649  
XRPX Acc No: N96-412818

Soln. method for statistics problem of e.g. mathematical program - by minimising lower-order sequence of problems after simultaneously satisfying attribute limits of problems  
Patent Assignee: IBM CORP (IBMC ); INT BUSINESS MACHINES CORP (IBMC )  
Inventor: LEE H S  
Number of Countries: 002 Number of Patents: 002  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 8249190	A	19960927	JP 9611793	A	19960126	G06F-009/44	199649 B
US 5666469	A	19970909	US 95384979	A	19950207	G06F-017/00	199742

Priority Applications (No Type Date): US 95384979 A 19950207  
 Language, Pages: JP 8249190 (10); US 5666469 (13)

- ...Abstract (Equivalent): b) building a segment graph in which items are **nodes** of the segment graph...
- ...c) creating an initial search **node** as a current search **node** in a search tree in the segment graph and initialize a search **nodes** stack ...
- ...d) finding open and closed paths of the current search **node** as multiple sets of subsequences wherein a subsequence comprises one or more **nodes** of the segment graph **linked** by an edge according to attributes of the **linked** items and so as not to violate any relevant constraints of the **linked** items...
- ...e) determining if there are any open paths in the current search **node** , if not, going to step (j), but otherwise continuing...
- ...f) from a set of segments in the open paths, collecting all edges and **ranking** them according to a merit that is evaluated by the segment graph structure as well as by a domain objective and from this **ranking** finding the best N edges where N is a beam width and saving the best N edges in sorted order in storage...
- ...g) determining if there are viable edges in the current search **node** and, if not, going to step (j), but otherwise popping the first best edge from storage and pushing it on a search **nodes** stack for future alternative search paths...
- ...h) expanding the search tree by creating a new search **node** in the segment graph, the selected edge concatenating two existing segments into one while creating a new segment in the segment graph...
- ...j) getting aggregate sizes of open and closed paths and if smallest in the search, setting to a solution **nodes** file, but if same as previous smallest, then adding to the solution **nodes** file...
- ...k) determining if the search **nodes** stack is empty or there is a sufficient number of solutions and, if so, terminating the search and exiting to step (1), otherwise popping a **node** from the search **nodes** stack and returning to step (e); and...
- ...l) displaying the search **node** file as a result of the search...

15/3,K/4 (Item 4 from file: 351)  
 DIALOG(R)File 351:DERWENT WPI  
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010667362 \*\*Image available\*\*  
 WPI Acc No: 96-164316/199617  
 XRPX Acc No: N96-137859

Automatic keyword extraction appts - has extraction part to extract specific keyword out of node link structure based on keyword ranking

Patent Assignee: RICOH KK (RICO )  
 Number of Countries: 001 Number of Patents: 001  
 Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 8044763	A	19960216	JP 94181075	A	19940802	G06F-017/30	199617 B

Priority Applications (No Type Date): JP 94181075 A 19940802  
 Language, Pages: JP 8044763 (38)



... has extraction part to extract specific keyword out of node link structure based on keyword ranking

...Abstract (Basic): a syntax parsing part (2) to analyse syntax of the natural language document. A data structure conversion part (3) makes the analysis result of the node structure given by the syntax parsing part, an independent word part. The relation between the independent word part in the node link structure is converted by a data structure conversion part (3) and expressed as a document...

...A ranking operation part (4) follows each node in the node link structure at the structure level between sentences, determining the weighting based on the information level parameter and computes the keyword ranking of the node. An extraction part extracts the specific keyword out of the node link structure based on the ranking.

...Title Terms: NODE ; LINK ;

15/3,K/5 (Item 5 from file: 351)  
 DIALOG(R)File 351:DERWENT WPI  
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010612970 \*\*Image available\*\*  
 WPI Acc No: 96-109923/199612  
 XRPX Acc No: N97-381371  
**OCR document logical structure analyser - determining attributes of lines and cost value measure for validity of determination, and travelling directed graph from start node while summing costs for nodes and links en route and ranking paths found based on sum of associated costs**  
 Patent Assignee: NIPPON IBM KK (IBMC ); INT BUSINESS MACHINES CORP (IBMC )  
 Inventor: TATEISHI Y  
 Number of Countries: 002 Number of Patents: 002  
 Patent Family:  

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 8006945	A	19960112	JP 94134014	A	19940616	G06F-017/27	199612 B
US 5669007	A	19970916	US 95395559	A	19950228	G06F-017/27	199743 T

Priority Applications (No Type Date): JP 94134014 A 19940616  
 Language, Pages: JP 8006945 (23); US 5669007 (25)

... determining attributes of lines and cost value measure for validity of determination, and travelling directed graph from start node while summing costs for nodes and links en route and ranking paths found based on sum of associated costs

...Abstract (Basic): costs. When the process for the whole document is completed, in accordance with a rule specifying the combination of attributes between the adjacent lines, the nodes of a graph are generated, the nodes are linked with each other, and costs are given to the node and links. There are paths for travelling the graph from the root node to the final node, and each of them means the interpretation of a possible logical structure of the document...

...By summing the costs for the travelled nodes and links, a total cost value can be associated with each path, and by prioritising by this total cost value, logical structure interpretations can be sequentially shown...

...Title Terms: NODE ;

15/3,K/6 (Item 6 from file: 351)  
 DIALOG(R)File 351:DERWENT WPI  
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010409905      \*\*Image available\*\*

WPI Acc No: 95-311252/199540

XRPX Acc No: N95-235085

**Intelligent hyper-media text system for on-line navigation - stores user goal objects and text panel objects to form hyper-text object, stores link profiles contg. link vectors each having weights representing user activity relationship between objects and uses advisor to create weight-ordered object**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC )

Inventor: CHEN J R; FALLSIDE D C; FENWICK J R; FORCIER M D; KAPLAN C A; WOLFF G J

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
US 5446891	A	19950829	US 92841965	A	19920226	G06F-017/30	199540 B
			US 94333082	A	19941102	B	

Priority Applications (No Type Date): US 92841965 A 19920226; US 94333082 A 19941102

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
US 5446891	A	Cont of	US 92841965	

Language, Pages: US 5446891 (17)

... stores user goal objects and text panel objects to form hyper-text object, stores link profiles contg. link vectors each having weights representing user activity relationship between objects and uses advisor to create weight-ordered object

...Abstract (Basic): acquires user characteristics either directly or inferentially. Simple associative networks serve to model user profiles, including relationships between user goals and the hyper-media information **nodes** . Hyper-media **links** to other **nodes** are recommended by **ranking** a **link** list in an order that depends on one or more user profiles containing information relating to users' goals and interests. Users can teach the system directly by rearranging the order of suggested **links** on the list. The system can also learn indirectly by observing how long and in what sequence the user views each hyper-media information **node** .

...

...ADVANTAGE - Avoids overwhelming user with choices by introducing concept of graduated **link** -weight values for ordering **linked nodes** in list, so that most relevant **link** targets appear first in list.  
Incorporates **links** between all nodes within hyper medium

...Title Terms: **LINK** ;

**15/3,K/7      (Item 7 from file: 351)**

DIALOG(R)File 351:DERWENT WPI

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010234074      \*\*Image available\*\*

WPI Acc No: 95-135331/199518

XRPX Acc No: N95-106665

**Network composition method for telephone circuits - uses traffic network and transmission circuit network to carry out creation and traffic assignment network topology and routing table**

Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE )

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 7058834	A	19950303	JP 93198222	A	19930810	H04M-003/00	199518 B

Priority Applications (No Type Date): JP 93198222 A 19930810

Language, Pages: JP 7058834 (23)

...Abstract (Basic): sequence indicates the connection between the TN using

010409905      \*\*Image available\*\*

WPI Acc No: 95-311252/199540

XRPX Acc No: N95-235085

**Intelligent hyper-media text system for on-line navigation - stores user goal objects and text panel objects to form hyper-text object, stores link profiles contg. link vectors each having weights representing user activity relationship between objects and uses advisor to create weight-ordered object**

Patent Assignee: INT BUSINESS MACHINES CORP (IBM )

Inventor: CHEN J R; FALLSIDE D C; FENWICK J R; FORCIER M D; KAPLAN C A; WOLFF G J

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
US 5446891	A	19950829	US 92841965	A	19920226	G06F-017/30	199540 B
			US 94333082	A	19941102	B	

Priority Applications (No Type Date): US 92841965 A 19920226; US 94333082 A 19941102

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
US 5446891	A	Cont of	US 92841965	

Language, Pages: US 5446891 (17)

... stores user goal objects and text panel objects to form hyper-text object, stores link profiles contg. link vectors each having weights representing user activity relationship between objects and uses advisor to create weight-ordered object

...Abstract (Basic): acquires user characteristics either directly or inferentially. Simple associative networks serve to model user profiles, including relationships between user goals and the hyper-media information **nodes**. Hyper-media **links** to other **nodes** are recommended by **ranking** a **link** list in an order that depends on one or more user profiles containing information relating to users' goals and interests. Users can teach the system directly by rearranging the order of suggested **links** on the list. The system can also learn indirectly by observing how long and in what sequence the user views each hyper-media information **node**.

...

...ADVANTAGE - Avoids overwhelming user with choices by introducing concept of graduated **link** -weight values for ordering **linked nodes** in list, so that most relevant **link** targets appear first in list. Incorporates **links** between all nodes within hyper medium

...Title Terms: **LINK** ;

**15/3,K/7      (Item 7 from file: 351)**

DIALOG(R)File 351:DERWENT WPI

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010234074      \*\*Image available\*\*

WPI Acc No: 95-135331/199518

XRPX Acc No: N95-106665

**Network composition method for telephone circuits - uses traffic network and transmission circuit network to carry out creation and traffic assignment network topology and routing table**

Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE )

Number of Countries: 001    Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 7058834	A	19950303	JP 93198222	A	19930810	H04M-003/00	199518 B

Priority Applications (No Type Date): JP 93198222 A 19930810

Language, Pages: JP 7058834 (23)

...Abstract (Basic): sequence indicates the connection between the TN using

a traffic network design part (15). The routing table in which the last destination and the low **rank node** of a call for every TN is created with a network creation part (17). Based on the routing table, a traffic is assigned to the...

...The traffic intensity which flows to a traffic **link** is performed with a traffic assignment part (18). The exchange corresponding to traffic intensity which flows through the TN and the number of exchanges are...

...indirect continuation sequence indicates the connection between exchanges. The routing table for every exchange is created by a routing table creation means (23) for every **node**.

15/3,K/8 (Item 8 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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010231107 \*\*Image available\*\*

WPI Acc No: 95-132364/199518

XRPX Acc No: N95-104157

**Automatic decomposition of network topology into backbone and sub areas - performs automatic decomposition of packet switching network in backbone nodes and sub areas to speed up routing path search without degrading optimisation criterion of routing algorithm**

Patent Assignee: INT BUSINESS MACHINES CORP (IBMC ); IBM CORP (IBMC )

Inventor: GALAND C; SCOTTON P; GALAAND C

Number of Countries: 014 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
EP 637153	A1	19950201	EP 93480105	A	19930730	H04L-012/56	199518 B
CA 2123441	A	19950131	CA 2123441	A	19940512	H04L-012/56	199518
JP 7066834	A	19950310	JP 94154988	A	19940706	H04L-012/56	199519
US 5495479	A	19960227	US 94262089	A	19940620	H04L-012/56	199614
CA 2123441	C	19990216	CA 2123441	A	19940512	H04L-012/56	199918

Priority Applications (No Type Date): EP 93480105 A 19930730

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
EP 637153	A1			

Designated States (Regional): AT BE CH DE ES FR GB IT LI NL SE

Language, Pages: EP 637153 (E, 42); JP 7066834 (23); US 5495479 (34)

**... performs automatic decomposition of packet switching network in backbone nodes and sub areas to speed up routing path search without degrading optimisation criterion of routing algorithm**

...Abstract (Basic): The access **node** receives and transmits data packets (301, 302 and 304) and stores the network configuration. It automatically pre-selects a set of usable **links** for each destination **node** located in the network, and stores locally the pre-selection of the usable **links**.

...

...The pre-linking includes decomposing the network into a set of backbone **nodes** and several subarea **nodes**. Backbone **links** are **links** connecting two backbone **nodes**, and subarea **links** are **links** connecting either two **nodes** in the same subarea or a subarea **node** and a backbone **node**.

...Abstract (Equivalent): A network access **node** (300) for a packet switching communication network (200) comprising a plurality of network **nodes** (201-208) interconnected with transmission **links** (209), said network **nodes** being connected to termination **nodes**, said access **node** including means for receiving and transmitting data packets (301, 302, 304), and data storage means (306) for storing data representing the network configuration, said network access **node** further including

...

...selecting means for selecting a set of **links** suitable for use as part of a path to each destination termination **node** located in the network, said selecting means further include clustering means for decomposing said network into a set of backbone **nodes** and a plurality of subarea **nodes** , said clustering means further comprising...

...sorting means for **ranking** all **nodes** according to the number of **links** connected to the **nodes** ,

...

...tree forming means for constructing a connectivity tree in which each **node** in the network appears only once and in which the tree origin is the highest **rank node** found by said sorting means...

...classifying means for classifying **nodes** into backbone **nodes** and subarea **nodes** , backbone **nodes** being all non-termination **nodes** and any termination **node** which is connected only to one other **node** and subarea **nodes** being any **node** that is not a backbone **node** , subarea **nodes** having the same parent being categorized in the same subarea...

...means for defining a backbone path between two subareas, the backbone path including a **link** to each subarea interconnected through the highest **ranked node** from the set of **nodes** connecting the two **links** ,

...

...means for removing from the set of backbone to subarea **links** , any **link** in which the parent **node** in the subarea is not connected to the parent in the backbone and any **link** to a subarea having less than a predetermined number of **nodes** ;

...

...storage means for storing data representing the sets of **links** selected by said selecting means; and...

...means responsive to a request for a connection between said access **node** and a destination **node** to establish a routing path including **links** from the set of **links** selected for the destination **node** .

...Title Terms: **NODE** ;

15/3,K/9 (Item 9 from file: 351)  
 DIALOG(R)File 351:DERWENT WPI  
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007321012

WPI Acc No: 87-318019/198745

**Data link token passing system for transmitter - has coupler uniting with each loop network for different rank terminal nodes NoAbstract Dwg 0/7**

Patent Assignee: HITACHI LTD (HITA )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 62226744	A	19871005	JP 8668465	A	19860328		198745 B

Priority Applications (No Type Date): JP 8668465 A 19860328  
 Language, Pages: JP 62226744 (4)

**Data link token passing system for transmitter...**

...has coupler uniting with each loop network for different rank terminal nodes **NoAbstract Dwg 0/7**  
 ...Title Terms: **LINK** ;

15/3,K/10 (Item 10 from file: 351)

DIALOG(R)File 351:DERWENT WPI  
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007098585

WPI Acc No: 87-098582/198714

**Priority sequenced exchange carrier link system for network - has preferential order data memory table permitting superior ranking trap of on-line channel, and host processor. NoAbstract Dwg 0/4**

Patent Assignee: FUJITSU LTD (FUIT )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
JP 62047761	A	19870302	JP 85189066	A	19850827		198714 B

Priority Applications (No Type Date): JP 85189066 A 19850827

Language, Pages: JP 62047761 (7)

**Priority sequenced exchange carrier link system for network...**

**...has preferential order data memory table permitting superior ranking trap of on-line channel, and host processor. NoAbstract Dwg 0/4**

**...Title Terms: LINK ;**

15/3,K/11 (Item 11 from file: 351)

DIALOG(R)File 351:DERWENT WPI  
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004527026

WPI Acc No: 86-030370/198605

XRPX Acc No: N86-021899

**Last intermediate node determin. in minimised switching net - establishing both local and general routing tables, and comparing elements of equal rank in column and row**

Patent Assignee: JEUMONT SCHNEIDER SA (JEUM ); JS TELECOMMUNICATIO (JSTE-N)

Inventor: DEVEZE P

Number of Countries: 015 Number of Patents: 008

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
EP 169757	A	19860129	EP 85401243	A	19850621		198605 B
FR 2567345	A	19860110					198609
ZA 8505050	A	19860110					198614
JP 61082562	A	19860426	JP 85146436	A	19850703		198623
CA 1235468	A	19880419					198820
US 4748660	A	19880531	US 85749007	A	19850626		198824
EP 169757	B	19900905					199036
DE 3579522	G	19901011					199042

Priority Applications (No Type Date): FR 8410612 A 19840704

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
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EP 169757	A			
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Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

EP 169757	B			
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Designated States (Regional): AT BE CH DE FR GB IT LI LU NL SE

Language, Pages: EP 169757 (F, 20)

**Last intermediate node determin. in minimised switching net...**

**...establishing both local and general routing tables, and comparing elements of equal rank in column and row**

**...Abstract (Basic): An electronic circuit located at an mth node incorporates a detector (1) for the elements (a sub ij) of the matrix (R1) representing direct paths, if any, to the nth node . The matrix and the last rows of a calculated matrix (Rq) are stored in a memory (3) from which a reader (41) extracts the nth...**

...Elements of equal **rank** in column and row are compared (5) and an output circuit (6) stores the address (i) of the last intermediate **node** corresp. to the **rank** of a non-xzeroe element found by the comparison...

...Abstract (Equivalent): A method of determining the last intermediate **node** of a route having a minimum of **nodes**, for going from the m-th **node** to the n-th **node**, in a network comprising p **nodes** interconnected by means of a plurality of sections (p being a positive integer), more particularly designed for routing both data between networked computers and telephonic...

...and storing the square matrix  $R_i = a_{ij} p p$  such that  $a_{ij} = 0$  if there is no direct section from the i-th to the j-th **node** and  $a_{ij} = 1$  if a direct section exists from the i-th to the j-th **node**, determining the existence of at least one path in two sections from the m-th to the n-th mode, where the direct section does not exit, by comparing the elements of the same **rank** of the m-th line and of the n-th column of said matrix  $R_1$ , the existence and the **rank** of any non-zero elements common to the m-th line and to the n-th column indicating the presence and the sequential position of an intermediate **node** of at least one two-section route, in the sence of any such common non-zero element, by iteration for any q varying from 2 to p-2 until a route of (q-1) sections has been determined to connect the m-th **node** to the n-th **node**, the square matrix  $X_q = R_q - 1.R_1 = Z_{ij} p p$  equal to the product of matrices  $R_q - 1$  and  $R_1$  is computed and then the square...

...1 if  $X_{ij}$  or  $a_{ij}$  is other than zero and  $b_{ij} = 0$  if  $X_{ij}$  and  $a_{ij}$  are both zero; and the elements of the same **rank** of the m-th line of matrix  $R_q$  and of the n-th column of matrix  $R_1$  are compared, the existence and the **rank** of any common non-zero elements indicating the presence and the sequential position of at least one possible last intermediate **node** of a route with q+1 sections. (13pp)

...Abstract (Equivalent): The process determines the last intermediate **node** of a pathway comprising a min. number of **nodes** from the m-th **node** to the n-th **node** in a network comprising p **nodes** interconnected by a number of **links** (p being a positive whole number

...

...The process includes steps of iterative matrix calculation and comparison of elements of the same **rank** of certain matrices, and is esp. suitable for communications networks constituted by a number of geographically separated **nodes** connected to one another by communications lines. (8pp)b

...Title Terms: **NODE** ;

15/3,K/12 (Item 12 from file: 351)  
 DIALOG(R) File 351:DERWENT WPI  
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004430928

WPI Acc No: 85-257806/198542

XRPX Acc No: N85-192701

**Local area network - has nodes in ring topology passing at least two classes of synchronous information on receiving token**

Patent Assignee: UNISEARCH LTD (UNIX )

Inventor: ANIDO G J; KARBOWIAK A E

Number of Countries: 006 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
EP 158364	A	19851016	EP 85104464	A	19850412		198542 B
AU 8540998	A	19851017					198547
US 4663748	A	19870505	US 85720880	A	19850408		198720

Priority Applications (No Type Date): AU 844548 A 19840412

Filing Details:

Patent	Kind	Filing Notes	Application	Patent
EP 158364	A			

Designated States (Regional): DE FR GB SE

Language, Pages: EP 158364 (E, 105)

... has nodes in ring topology passing at least two classes of synchronous information on receiving token

...Abstract (Basic): token. The token is in the form of a unique digital code. The system carries at least two classes of information, each assigned a priority **ranking**. At least one class is synchronous information for which the transmitting **node** must be serviced periodically...

...A new system transmission cycle is commenced at regular time intervals. Each **node** operates under a protocol where a first pass of the token around the ring during a system cycle is used to transmit synchronous information of the highest priority **ranking**. The time token for each pass of the token is dependent on the number of **nodes**.

...Abstract (Equivalent): The network has a ring topology comprising a number of **nodes** (10) each of which is connected to adjacent **nodes** by **links** (14,15). Each **node** comprises a **Link** Interface Unit (LIU) (11), a Network Inter force Unit (NIU) (12) and a Terminal Interface Unit (TIU) (13). By providing forward and reverse **links** (14,15) between **nodes**, the communication system is capable of reconfiguring itself after **link** or **node** failure such that the failed equipment can be bypassed to minimise system disruption...

...The **link** Interface Units (LIU) (11) are also capable of bypassing their own **node** if a **node** failure is detected. System control is decentralised with each active **node** contributing to system control such that prime-failure sites are avoided. System protocol depends upon a token passing scheme where only the **node** (10) currently holding the token is entitled to transmit data and once it has fins finished its transmission the **node** (10) passes the token to the next **node**

...Title Terms: **NODE** ;

15/3,K/13 (Item 13 from file: 351)

DIALOG(R)File 351:DERWENT WPI

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003387079

WPI Acc No: 82-P5115E/198244

**Diagnostics of mechanisms - by converting schematic structural diagram into weighted functional diagram to enable weakest elements to be identified**

Patent Assignee: MOGIL MECH ENG INST (MOGI-R)

Inventor: BLAGODARNY V M; DANOV A M; EMELYANOV K K

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Main IPC	Week
SU 896461	B	19820107					198244 B

Priority Applications (No Type Date): SU 2892051 A 19800305

Language, Pages: SU 896461 (5)

...Abstract (Basic): A method of finding the weakest **links** in a complex mechanism which limit the life expectancy of the entire unit is based on first constructing a structural schematic diagram for the mechanism in which the elements are represented by the **nodes**, and the functions between them by the **links**. The highest **rank**s of the **nodes** of the diagram are determined and the elements are grouped into diagnostic sections...

...This structural diagram is converted to a functional diagram in which the **nodes** represent the functions, and the **links** represent the elements. The **links** of the functional diagram are given a weight, proportional to the transmission ratio, and the **links** of the structural diagram are given a weight proportional to the **rank** as regards the inputs of the **nodes** of the functional diagram which



correspond to them. **Nodes** of the structural diagram with the highest **ranks** are then included in the list of the weakest members. This reduces the amount of calculation and preparation in the design of complex mechanisms. Bul...

**15/3,K/14 (Item 1 from file: 347)**

DIALOG(R)File 347:JAPIO

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06011633 \*\*Image available\*\*

DISPLAY METHOD FOR COMMUNICATION NETWORK CONFIGURATION

PUB. NO.: 10-294733 [JP 10294733 A]

PUBLISHED: November 04, 1998 (19981104)

INVENTOR(s): YOKOYAMA TAKAKO

APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 09-103506 [JP 97103506]

FILED: April 21, 1997 (19970421)

ABSTRACT

...SOLUTION: An exchange at a highest **rank node** is extracted from a **node** information 11 (S11). Then an exchange of a 2nd **rank node** is retrieved (S12) from a **link** information 12, and hierarchical sequencing of the retrieved exchanges is made (S13), and the result is stored (S14) as hierarchical structure data 13. When hierarchical...

**15/3,K/15 (Item 2 from file: 347)**

DIALOG(R)File 347:JAPIO

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05089263 \*\*Image available\*\*

AUTOMATIC KEY WORD EXTRACTING DEVICE

PUB. NO.: 08-044763 [JP 8044763 A]

PUBLISHED: February 16, 1996 (19960216)

INVENTOR(s): YOKOGAWA TOSHIHIKO

APPLICANT(s): RICOH CO LTD [000674] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 06-181075 [JP 94181075]

FILED: August 02, 1994 (19940802)

ABSTRACT

...CONSTITUTION: A data converting means 3 converts the analytic result of a syntax analyzing means 2 into a **node link** structure connecting **node link** structures by regarding independent word parts as the **node** structures and the relation between the independent word parts as a **link** structure and a **ranking** arithmetic means 4 calculates the key word **ranking** of respective **nodes** in the **node link** structure by following the **nodes** while weighting them on the basis of parameters corresponding to the level of information on inter-sentence structure level or in-sentence structure level, thereby using the **ranking** for key word extraction.

**15/3,K/16 (Item 3 from file: 347)**

DIALOG(R)File 347:JAPIO

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04828827 \*\*Image available\*\*

HYPER TEXT DEVICE

PUB. NO.: 07-121427 [JP 7121427 A]

PUBLISHED: May 12, 1995 (19950512)

INVENTOR(s): SHIMIZU TAKESHI

SAITO TAKAHIRO

NAKAMURA OSAMU

APPLICANT(s): FUJI XEROX CO LTD [359761] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 05-289761 [JP 93289761]  
FILED: October 27, 1993 (19931027)

ABSTRACT

PURPOSE: To easily construct an application program which switches **node** display at every prescribed time in a specified order by giving a **rank** to a **link** between the **nodes** of a hyper text and providing a user interface operating the **rank**.

... by the operation of a user and informs an interface control part 1 of it. A program execution part 3 indicates the generation of the **nodes**, the generation of the **link** and the change operation of the **link rank** to a **node** information management part 5, a **link** information management part 6 and a **link rank** operation part 7 by the indication of the interface control part 1. The **node** information management part 5 manages plural **node** information structures holding information on the **nodes** and the **link** information management part 6 manages the plural **link** information structures holding the relation between the **nodes**. The **link rank** operation part 7 changes the **rank** of the **link** information structures 9 referred by the **node** information management part 5 by the indication of the program execution part 3.

15/3,K/17 (Item 4 from file: 347)  
DIALOG(R)File 347:JAPIO  
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04571013 \*\*Image available\*\*  
DISPLAY DEVICE PROVIDED WITH **NODE** ON MULTIWINDOW

PUB. NO.: 06-242913 [JP 6242913 A]  
PUBLISHED: September 02, 1994 (19940902)  
INVENTOR(s): YAMAGUCHI SHUICHI  
APPLICANT(s): TOSHIBA MEDICAL ENG CO LTD [491188] (A Japanese Company or Corporation), JP (Japan)  
TOSHIBA CORP [000307] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 05-027070 [JP 9327070]  
FILED: February 17, 1993 (19930217)  
JOURNAL: Section: P, Section No. 1835, Vol. 18, No. 630, Pg. 126, November 30, 1994 (19941130)

DISPLAY DEVICE PROVIDED WITH **NODE** ON MULTIWINDOW

ABSTRACT

...CONSTITUTION: This device is equipped with a window management list 20 constituted of a window ID21 and **node** number 22, **node** information list 30 constituted of a **node** number 31 and window information 32, **node** relation list 40, and data connection relation managing means which manages the connection relation of data. The window information 32 is equipped with a window ID32-1, classification 32-2, size 32-3, preparing time 32-4, protection information 32-5, number of **link** 32-6, and relation list pointer 32-7. In the window relation list, higher-**rank** layer, window itself, same-**rank** layer, and lower-**rank** layer are expressed by a **node** division 41 for classifying the window to be referred to and the related windows, and specifying the hierarchical structure of the classified windows by upper...

15/3,K/18 (Item 5 from file: 347)  
DIALOG(R)File 347:JAPIO  
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04497140 \*\*Image available\*\*

INDIVIDUAL BLOCK TRANSFER SYSTEM WITH HEADER IN DISTRIBUTED TYPE  
COMMUNICATION NETWORK

PUB. NO.: 06-141040 [JP 6141040 A]  
PUBLISHED: May 20, 1994 (19940520)  
INVENTOR(s): TAKASE JIYUUROU  
APPLICANT(s): TAKASE JIYUUROU [000000] (An Individual), JP (Japan)  
APPL. NO.: 04-327150 [JP 92327150]  
FILED: October 26, 1992 (19921026)  
JOURNAL: Section: E, Section No. 1594, Vol. 18, No. 447, Pg. 122,  
August 19, 1994 (19940819)

ABSTRACT

PURPOSE: To control the overflow of a buffet in each switching **node** and to hold reliability by keeping tendency to uniformize the distribution of the flow rate density of a block signal with header in a network...

...CONSTITUTION: The block signal with header (HB) arriving from an input route **link** in a transmission network and a subscriber network inputted to input terminals 14, 15 is read out by an identification information reader group 16, and is sent to an output route **link** number indicator group 17 and an HB switch 24. The indicator group 17 decides the output route of the switch 24 based on an identification...

... measures the number of HB signals per time running on the output route, and sends it to the comparator 26. The comparator 26 sends the **rank** information of the output route with large flow rate allowance for the flow rate limitation of each output route to the indicator group 17 by...

15/3,K/19 (Item 6 from file: 347)

DIALOG(R)File 347:JAPIO

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03385654 \*\*Image available\*\*  
PACKET SWITCHBOARD

PUB. NO.: 03-048554 [JP 3048554 A]  
PUBLISHED: March 01, 1991 (19910301)  
INVENTOR(s): ABE MASAMI  
NOGUCHI OSAMU  
APPLICANT(s): OKI ELECTRIC IND CO LTD [000029] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 01-251875 [JP 89251875]  
FILED: September 29, 1989 (19890929)  
JOURNAL: Section: E, Section No. 1067, Vol. 15, No. 187, Pg. 83, May 14, 1991 (19910514)

ABSTRACT

... efficiently use a connection network by setting a single route in unit of call of the route with a switch route setting processor when a **node** route setting processor selects the route...

...CONSTITUTION: The **node** route setting processor 14 makes access a module **link** working table 16, and discriminates the route with the highest allowance on a traffic, and sets a switching module SM 12 and a **rank** included in the route of the connection network 10 of a switching machine 60. The switch route setting processor 30 of the SM 12 receiving...

... when receiving a report feasible to perform the setting of the route, instructs the change of a routing header correspondence table 32 and a switch **link** working table 34 to the processor 30, and changes its own working table 16. Thus, the single route can be set in unit of call...

15/3,K/20 (Item 7 from file: 347)

DIALOG(R)File 347:JAPIO

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03374880      \*\*Image available\*\*

RELATIVE **RANK** ANALYZING SYSTEM FOR DATA DRIVING TYPE PROCESSOR

PUB. NO.: 03-037780 [JP 3037780 A]  
PUBLISHED: February 19, 1991 (19910219)  
INVENTOR(s): NAITOU HIROMIKI  
APPLICANT(s): SHARP CORP [000504] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 01-172578 [JP 89172578]  
FILED: July 04, 1989 (19890704)  
JOURNAL: Section: P, Section No. 1198, Vol. 15, No. 176, Pg. 61, May  
07, 1991 (19910507)

RELATIVE **RANK** ANALYZING SYSTEM FOR DATA DRIVING TYPE PROCESSOR

#### ABSTRACT

PURPOSE: To generate an execution object at a high speed by bringing each intermediate object to relative **ranking** in advance...

... and generated are compiled to intermediate objects 2 shown by a flow graph, respectively, and a variable giving means gives a variable corresponding to its **rank** value to a **node** of the head of the flow graph shown by the intermediate object 2. Subsequently, a relative **rank** value giving means discriminates the number of arcs inputted to a node with regard to the **node** after the head, compares **rank** values of the **node** immediately before and gives a relative **rank** value to its **node** or the arc. Also, at the time of **linking** the intermediate object 2, a registering means registers an absolute **rank** value corresponding to the execution sequence of the head **node** to a variable, therefore, the absolute **rank** value of all the **nodes** is determined immediately. In this regard, the variable giving means, the relative **rank** value giving means and the registering means are softwares. In such a way, the **rank** analysis becomes unnecessary and the execution object can be generated at a high speed.

15/3,K/21      (Item 8 from file: 347)

DIALOG(R)File 347:JAPIO

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03248692      \*\*Image available\*\*

METHOD FOR DIVIDING PROGRAM

PUB. NO.: 02-224192 [JP 2224192 A]  
PUBLISHED: September 06, 1990 (19900906)  
INVENTOR(s): INAOKA MIE  
MUNAKATA KOICHI  
SHIMA KENJI  
APPLICANT(s): MITSUBISHI ELECTRIC CORP [000601] (A Japanese Company or Corporation), JP (Japan)  
APPL. NO.: 01-045641 [JP 8945641]  
FILED: February 27, 1989 (19890227)  
JOURNAL: Section: P, Section No. 1134, Vol. 14, No. 530, Pg. 104,  
November 21, 1990 (19901121)

#### ABSTRACT

PURPOSE: To evade the drop of through-put due to excessive division and a saturated state due to the lack of division by dividing **nodes** so that the number of **nodes** in each **rank** of a program to be executed by plural processors is uniformed...

...CONSTITUTION: A data driving type processor consists of an input control part 1, a **link** table 2, a function table 3, an address formation/flow control part 4, a data memory 5, a queue 6, an output queue 8, an...

... number of packets is set up to a value less than the sum of the number of pipeline stages and the buffer size and respective **nodes** are allocated to respective processors so that the number of **nodes** in each **rank** is

uniformed. Consequently, the drop of the through-put due to excessive division can be prevented and the saturated state of a circulated pipeline due...

15/3,K/22 (Item 9 from file: 347)

DIALOG(R)File 347:JAPIO

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02992434 \*\*Image available\*\*

GRAPH STORING SYSTEM

PUB. NO.: 01-290034 [JP 1290034 A]

PUBLISHED: November 21, 1989 (19891121)

INVENTOR(s): SHIOBARA MORIHITO

NAKAGAWA KOYO

GOTO TOSHIYUKI

APPLICANT(s): FUJITSU LTD [000522] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 63-119299 [JP 88119299]

FILED: May 18, 1988 (19880518)

JOURNAL: Section: P, Section No. 1004, Vol. 14, No. 72, Pg. 55,  
February 09, 1990 (19900209)

#### ABSTRACT

... increase collating and searching speeds and at the same time to reduce the capacity of a cache memory by storing the scale evaluation values of **NODEs** in the order of larger values and based on the scale (**NODE** number, **LINK** length, etc.,) designated by a user...

...CONSTITUTION: A full **NODE** evaluation value calculation means 10 repeats the selecting procedure of a slave **NODE** selection means 8 and the evaluation value calculating procedure of a master **NODE** evaluation value calculation means 9 up to the root **NODE** from the leaf **NODE** meaning the lowest **rank** of a tree structure produced by a tree structure evolution means 6. Thus the means 10 decides the evaluation values of all **NODEs**. A graph production means 11 evaluates the value of each **NODE** and at the same time rearranges the graphs stored in a 1st graph holding means 5 in the order of larger evaluation values for production of a graph. Thus a graph showing the connecting relation between the **NODEs** and the **LINK** is evolved into a tree structure with a certain **NODE** defined as a root. Then the evaluation value of each **NODE** is calculated toward the higher **ranks** from the lowest **rank** leaf **NODE** gathering. Then the **NODEs** are rearranged in the order of higher evaluation values. Thus the comparison is facilitated among evaluation values in the retrieving and collating modes.

15/3,K/23 (Item 10 from file: 347)

DIALOG(R)File 347:JAPIO

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02848122

INTER-WORD SEMANTIC RELATION DECIDING SYSTEM

PUB. NO.: 01-145722 [JP 1145722 A]

PUBLISHED: June 07, 1989 (19890607)

INVENTOR(s): ONOYAMA TAKASHI

APPLICANT(s): HITACHI SOFTWARE ENG CO LTD [472485] (A Japanese Company or Corporation), JP (Japan)

APPL. NO.: 62-305377 [JP 87305377]

FILED: December 01, 1987 (19871201)

JOURNAL: Section: P, Section No. 929, Vol. 13, No. 403, Pg. 117,  
September 07, 1989 (19890907)

#### ABSTRACT

... speed the semantic relation between words, which is expressed by a tree structure data by comparing large and small relations of the number of lower **nodes** of each **node** which is stored in a semantic table, in accordance with a search **rank** order and deciding an inclusive relation of

semantics between words...

...CONSTITUTION: The title system is provided with a semantic table for coordinating each word to each **node** of a tree, **linking** between each **node** , executing a search of each **node** of a tree structure data by a depth priority search in advance with respect to the tree structure data which has expressed a semantic relation between words, deriving the number of lower **nodes** contained in the lower **rank** of each **node** , and storing the number of lower **nodes** in accordance with a search **rank** order of each **node** . Accordingly, an inclusive relation of each **node** can be decided by comparing the numerical values of large and small relations of a **rank** order of a table data, and large and small relations of the number of lower **nodes** stored in accordance with its **rank** order and the **rank** order difference, by which an inclusive relation of semantics between words can be decided at a high speed.

15/3,K/24 (Item 11 from file: 347)

DIALOG(R)File 347:JAPIO

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01182957 \*\*Image available\*\*

PATH RETRIEVAL SYSTEM

PUB. NO.: 58-120357 [JP 58120357 A]

PUBLISHED: July 18, 1983 (19830718)

INVENTOR(s): NAKAMURA MAMIKO

SHIOHAMA JIRO

OKI KATSUHIRO

APPLICANT(s): FUJITSU LTD [000522]..(A Japanese Company or Corporation), JP  
(Japan)

APPL. NO.: 57-003822 [JP 823822]

FILED: January 13, 1982 (19820113)

JOURNAL: Section: E, Section No. 203, Vol. 07, No. 229, Pg. 145,

October 12, 1983 (19831012)

#### ABSTRACT

PURPOSE: To retrieve the minimum path with a slight storage area even if there is a limit in the number of **links** , by using a specific path retrieval algorithm and performing the retrieval of reciprocating path from a start **node** to an end **node** with the limited **link** number...

...CONSTITUTION: First, label of the start **node** (s) is denoted as 0000. A **node** label is determined as to **nodes** c, a, t of a **link rank** 1 toward the **node** s. Next, the label is determined for the **link rank** 2, i.e., **nodes** a, d, b toward the **nodes** c, a, t. In case of the **node** (a), the new and old labels are compared, and when the number of **link** of the new label is large and the interval from the **node** (s) is short, the label is revised into the new one. The label is determined for the **nodes** e.t.b being the **rank** 3, and similar operations are performed. In case of the **link rank** 4, since the limit of the number of **links** is limited to 3, back tracing is performed. The label having the **link** number less by 1 is adopted, and the counter **node** is found out with the label, and the path is retrieved up to the **node** (s) and this path is adopted.

File 2:INSPEC 1969-1999/May W5  
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     (c) 1999 INIST/CNRS  
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 File 103:Energy SciTec 1974-1999/May B2  
     (c) 1999 Contains copyrighted material  
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 File 14:Mechanical Engineering Abs 1973-1999/Mar  
     (c) 1999 Cambridge Sci Abs  
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     (c) Information Today, Inc  
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     (c)1999 Japan Science and Tech Corp(JST)  
 File 370:Science 1996-1999/Apr W3  
     (c) 1999 AAAS  
 File 99:Wilson Appl. Sci & Tech Abs 1983-1999/Apr  
     (c) 1999 The HW Wilson Co.

Set	Items	Description
S1	5293185	CATEGORI? OR RANK OR PRIORIT? OR RATE OR HIERARCH? OR ORDER OR CLASSIF?
S2	1472309	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	2259998	LINK? OR CONNECT? OR JOIN OR COMBINE? OR BACK()LINK? OR BA- CKLINK?
S4	755880	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR LIBRARY
S5	184785	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	3334689	CITATION? OR DOCUMENT? OR REPORT? ?
S7	7470	WEIGHTED(7N)SUM
S8	1795	(S1(7N)S2)(10N)S3
S9	44	S8(S)S5
S10	34	RD (unique items)

10/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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5969198 INSPEC Abstract Number: C9808-6160Z-029

**Title: Some conditions for cost efficiency in hypermedia**

Author(s): Westland, J.C.

Author Affiliation: Hong Kong Univ., Hong Kong

Journal: Information Processing & Management vol.34, no.2-3 p. 309-23

Publisher: Elsevier,

Publication Date: March-May 1998 Country of Publication: UK

CODEN: IPMADK ISSN: 0306-4573

SICI: 0306-4573(199803/05)34:2/3L:309:SCCE;1-J

Material Identity Number: I276-98002

U.S. Copyright Clearance Center Code: 0306-4573/98/\$19.00+0.00

Language: English

Copyright 1998, IEE

...Abstract: in multimedia and hypertext have created new opportunities for providing information to business and consumers. Hypermedia has appeared as an important tool for accessing the **Internet**. Prior hypermedia research mainly has recommended design standards for the interface. The current research models the administrative and operating costs surrounding a hypermedia database, and...

...as the learning rate increases-large databases are more easily justified if the users can be assured of picking up useful information when traversing the **nodes**. The learning **rate** can be increased by careful construction of **links** and nodes so that they are maximally informative.

10/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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5940035 INSPEC Abstract Number: C9807-7210-044

**Title: Semantic stimulus structure in World Wide Web interface design for navigation by novice users**

Author(s): Knizhnik, S.Z.; van Hemel, P.E.; Miller, M.; Goldfield, G.

Author Affiliation: Hughes Training Inc., Falls Church, VA, USA

Conference Title: Design of Computing Systems: Cognitive Considerations. Proceedings of the Seventh International Conference on Human-Computer Interaction (HCI International '97) Part vol.2 p.823-6 vol.2

Editor(s): Salvendy, G.; Smith, M.J.; Koubek, R.J.

Publisher: Elsevier, Amsterdam, Netherlands

Publication Date: 1997 Country of Publication: Netherlands 2 vol. (xxvi+879+xxviii+1027) pp.

ISBN: 0 444 82183 X Material Identity Number: XX98-01308

Conference Title: Proceedings of HCI International 97. 7th International Conference on Human Computer Interaction jointly with 13th Symposium on Human Interface

Conference Date: 24-29 Aug. 1997 Conference Location: San Francisco, CA, USA

Language: English

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Abstract: Human interaction with the **World Wide Web** system presents users with a very complex challenge. One of the most significant factors contributing to this challenge is user comprehension of interaction with **Web** structure. Perhaps the most difficult aspect of this interaction is that, in **order** to follow or backtrack among **linked** information **nodes**, it is often necessary to follow complex navigation paths between and within **Internet** sites. With more and more information being added to the **Internet** every day, response times and, in turn, usability, continue to get worse. **Web** browsers are becoming more complex and more difficult to use. They have more features and users need to hunt down and install extensions before advanced **Web** sites can be accessed. There is wide variability in the usability designed into **Web** sites and interfaces, and these interfaces are seldom designed for the novice user. Consequently, the



novice user browsing the **Web** is almost inevitably faced with changing interfaces, unfamiliar navigation models, new applets, and new interaction styles that are confusing at best. The paper reports the results of a study to compare the performance of users, ranging in **Web** experience from novice to advanced, on **Web** software applications. It was hypothesized that novice users, applying a poorly differentiated and unstructured conceptual model for **Internet** / **Web** navigation, would exhibit poorer performance than advanced users on tasks requiring **Internet** navigation for their completion.

10/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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5890775 INSPEC Abstract Number: B9805-6150C-082

**Title: Rate estimation and flow control of best effort traffic in heterogeneous networks**

Author(s): Moorthy, R.N.; Jain, B.N.; Saran, H.

Author Affiliation: Dept. of Comput. Sci. & Eng., Indian Inst. of Technol., Delhi, India

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA) vol.3231 p.479-90

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 1997 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(1997)3231L.479:REFC;1-2

Material Identity Number: C574-97296

U.S. Copyright Clearance Center Code: 0277-786X/97/\$10.00

Conference Title: Performance and Control of Network Systems

Conference Sponsor: SPIE

Conference Date: 3-5 Nov. 1997 Conference Location: Dallas, TX, USA

Language: English

Copyright 1998, IEE

...Abstract: queuing. Although our scheme is presented in the context of a connection oriented network it is also applicable in a datagram network, such as the **Internet**. An important feature of the proposed scheme is that it requires no support from the underlying network and lower layers to indicate or control congestion...

... the mean spread of sets of uniformly spaced packets to estimate the available bandwidth at the bottleneck server (switch/router) along the path of a **connection**. This estimate of available bandwidth is then fed to a **controller** which adjusts the sending **rate** so as to maintain a certain number of packets buffered at the bottleneck server. The proposed rate estimation and control scheme is studied extensively using...

10/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

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5763751 INSPEC Abstract Number: C9801-7250N-005

**Title: WebQuery: searching and visualizing the Web through connectivity**

Author(s): Carriere, S.J.; Kazman, R.

Author Affiliation: Software Eng. Inst., Carnegie Mellon Univ., Pittsburgh, PA, USA

Journal: Computer Networks and ISDN Systems vol.29, no.8-13 p. 1257-67

Publisher: Elsevier,

Publication Date: Sept. 1997 Country of Publication: Netherlands

CODEN: CNISE9 ISSN: 0169-7552

SICI: 0169-7552(199709)29:8/13L.1257:WSVT;1-4

Material Identity Number: I876-97008

U.S. Copyright Clearance Center Code: 0169-7552/97/\$17.00

Conference Title: Sixth International World Wide Web Conference

Language: English

Copyright 1997, IEE

Abstract: Finding information located somewhere on the **World Wide Web** is an error prone and frustrating task. The WebQuery system offers a powerful new method for searching the **Web** based on connectivity and content. We do this by examining links among the nodes returned in a keyword based query. We then **rank** the **nodes**, giving the highest **rank** to the most highly **connected nodes**. By doing so, we are finding "hot spots" on the **Web** that contain information germane to a user's query. WebQuery not only ranks and filters the results of a **Web** query, it also extends the result set beyond what the search engine retrieves, by finding "interesting" sites that are highly connected to those sites returned...

10/3,K/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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5483997 INSPEC Abstract Number: C9703-6150N-003

**Title: Performance of hierarchical load sharing in heterogeneous distributed systems**

Author(s): Lo, M.; Dandamudi, S.P.

Author Affiliation: Sch. of Comput. Sci., Carleton Univ., Ottawa, Ont., Canada

Conference Title: Proceedings of the ISCA International Conference. Parallel and Distributed Computing Systems Part vol.1 p.370-7 vol.1

Editor(s): Yetongnon, K.; Hariri, S.

Publisher: Int. Soc. Comput. & Their Appl.-ISCA, Raleigh, NC, USA

Publication Date: 1996 Country of Publication: USA 2 vol. x+825 pp.

Material Identity Number: XX96-02455

Conference Title: Proceedings of 9th International Conference on Parallel and Distributed Computing Systems. PDCS '96

Conference Sponsor: ISCA; IEEE Comput. Soc.; IEEE Tech. Committee on Operating Syst.; et al

Conference Date: 25-27 Sept. 1996 Conference Location: Dijon, France

Language: English

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...Abstract: performance benefits of such a policy. In addition, the single coordinator causes fault-tolerance problems as the load distribution is dependent on this single coordinator **node**. Furthermore, in large **hierarchically** distributed networks (e.g., several **LAN** clusters **connected** by a WAN), consulting the central coordinator is expensive and leads to performance problems. The hierarchical policy minimizes these performance bottlenecks. We compare the performance...

10/3,K/6 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

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4998703 INSPEC Abstract Number: B9508-6210L-110, C9508-5620W-016

**Title: Risks and threats from Internet access: protecting the institution**

Author(s): Kallman, E.A.

Author Affiliation: Bentley Coll., Waltham, MA, USA

Conference Title: Ethics in the Computer Age Conference Proceedings p. 33-8

Editor(s): Kizza, J.M.

Publisher: ACM, New York, NY, USA

Publication Date: 1994 Country of Publication: USA ix+210 pp.

ISBN: 0 89791 644 1

U.S. Copyright Clearance Center Code: 0 89791 644 1/94/0011/\$3.50

Conference Title: Proceedings of Ethics in the Computer Age

Conference Sponsor: ACM

Conference Date: 11-13 Nov. 1994 Conference Location: Gatlingburg, TN, USA

Language: English

Copyright 1995, IEE

Abstract: The **Internet** provides a number of capabilities to users. They can be divided into four general **categories** : Email-to virtually anyone on an **Internet node** ; Telnet-a direct **connection** to remote computers on the **Internet** , providing access to files, indices and other information resources at those locations; File Transfer Protocol (FTP)-a procedure which enables copying of files (documents, programs, pictures) between computing systems at different **Internet** locations; News Groups-thousands of electronic discussion groups through which messages are disseminated to subscribing users at **Internet** locations. Each of these categories poses some threat to the institution providing **Internet** access to users. Those responsible for this resource must understand the threats and take appropriate action to protect both the resource and the institution. At Bentley College, an **Internet** policy is in place, which along with other policies and practices meets these challenges.

10/3,K/7 (Item 7 from file: 2)  
DIALOG(R)File 2:INSPEC  
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4913480

**Title: Barbarians at the gateway**  
Author(s): Lipner, S.B.  
Author Affiliation: Trusted Inf. Syst. Inc., Glenwood, MD, USA  
Journal: Business Communications Review vol.25, no.1 p.63-5  
Publication Date: Jan. 1995 Country of Publication: USA  
CODEN: BCORBD ISSN: 0162-3885  
U.S. Copyright Clearance Center Code: 0162-3885/95/\$0.50  
Language: English  
Copyright 1995, IEE

Abstract: During the 1980s there were a series of intrusions of worldwide computer networks. The **Internet** "worm" was perhaps the most visible. In order to access computers that are connected to a corporate network, an intruder needs a minimum of two...

... if a security manager at headquarters knows what connections have been authorized at a corporate level, he or she could be blissfully unaware of the **connections** initiated by a **branch** or plant manager in **order** to "get the job done". Similarly, despite the hype about the **Internet** , an **Internet** access point is one of several potential points of entry.

10/3,K/8 (Item 8 from file: 2)  
DIALOG(R)File 2:INSPEC  
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4503459 INSPEC Abstract Number: B9311-6210L-139, C9311-5620L-062

**Title: LANs connectivity via ISDN**  
Author(s): Lim, E.K.; Subramanian, K.R.; Koh, K.H.; Cheng, T.H.  
Author Affiliation: Sch. of Electr. & Electron., Nanyang Technol. Univ., Singapore  
Conference Title: Communications on the Move. Singapore. ICCS/ISITA '92(Cat. No.92TH0479-6) p.87-91 vol.1  
Editor(s): Ng, C.S.; Yeo, T.S.; Yeo, S.P.  
Publisher: IEEE, New York, NY, USA  
Publication Date: 1990 Country of Publication: USA 3 vol. (xxvii+1422) pp.  
ISBN: 0 7803 0803 4  
Conference Sponsor: IEEE; Singapore Telecommn.; Telecommn.Authority Singapore; et al  
Conference Date: 16-20 Nov. 1992 Conference Location: Singapore  
Language: English

...Abstract: has increased due to the proliferation of LANs. One of the most efficient ways of network interconnection will be the use of the ISDN. A **LAN** /ISDN gateway is proposed to allow **LAN** users to establish

**connection** flexibly with LANs from different vendors, and also with ISDN **terminals** . In **order** to achieve this goal, a new addressing scheme, deriving from the hierarchical addressing technique, and the multiple-host assignment technique, is adopted.

10/3,K/9 (Item 9 from file: 2)

DIALOG(R)File 2:INSPEC

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4487248 INSPEC Abstract Number: B9311-6210L-013, C9311-5620L-003

**Title: Internet design using parametric indices**

Author(s): Harris, N.G.

Author Affiliation: Dept. of Electr. Eng., Univ. of the Witwatersrand, Johannesburg, South Africa

Journal: Transactions of the South African Institute of Electrical Engineers vol.84, no.1 p.16-20

Publication Date: March 1993 Country of Publication: South Africa

CODEN: TSAEA9 ISSN: 0038-2221

Language: English

**Abstract:** Internetworking standards have enabled designers of internets to use devices from multiple vendors. In the design of an **internet** , two of the major technical problems revolve around the optimum selection of links between nodes and the location of the root of the tree which spans the configuration. The tree and its root form a **hierarchy** of **branches** which **link** all **nodes** in an **internet** such that no loop paths exist between nodes. The author describes how an **internet** descriptor can be used to assess effects on performance and reliability of the location of the root and configuration of the tree in an **internet** . In the two design examples, **internet** trees are examined in terms of their compactness.

**Internet** throughput, end-to-end transmission time, configuration balancing and cost are all directly related to the degree of compactness of the tree, as is shown.

10/3,K/10 (Item 10 from file: 2)

DIALOG(R)File 2:INSPEC

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04075525 INSPEC Abstract Number: B9203-6210L-015, C9203-5620L-009

**Title: IVDLAN standardization and development**

Author(s): Shimizu, H.; Watanabe, K.; Katsura, Y.; Tsuruta, K.; Abe, T.

Author Affiliation: Bus. Commun. Div., NEC Corp., Abiko, Japan

Journal: IEICE Transactions vol.E74, no.9 p.2696-702

Publication Date: Sept. 1991 Country of Publication: Japan

CODEN: IEITEF ISSN: 0917-1673

Language: English

**...Abstract:** providing person-to-person communication as well as improving office work efficiency, demands for multimedia communication services have increased. This paper discusses Integrated Voice/Data **LAN** (IVDLAN) for handling multimedia communications. First, the IEEE 802.9 IVDLAN working group activities on a user access network which dedicatedly provides a multi-megabit...

**... IVDLAN** product APEX 8000/10 which meets the IEEE 802.9 architecture. A set of an ISDN terminal and an IEEE 802.3 terminal are **connected** to the **node** through a **terminal** adapter. The line **rate** is 4.096 Mbit/s and the maximum line length is 600 m. The IVDLAN node has an 128 Mbit/s burst switching module and...

10/3,K/11 (Item 11 from file: 2)

DIALOG(R)File 2:INSPEC

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04064281 INSPEC Abstract Number: B9202-6210L-344, C9202-5620L-128

**Title: LAN interconnect using X.25 network services**

Author(s): Barrett, J.J.; Wunderlich, E.F.

Author Affiliation: AT&T Bell Lab., Holmdel, NJ, USA

Journal: IEEE Network vol.5, no.5 p.12-16

Publication Date: Sept. 1991 Country of Publication: USA

CODEN: IENEET ISSN: 0890-8044

U.S. Copyright Clearance Center Code: 0890-8044/91/0900-0012\$01.00

Language: English

Abstract: The use of X.25 for medium-speed applications (<56 kb/s) in personal computer **local area networks** (LANs) is considered, focusing on a number of popular **LAN**-based applications that are appropriately matched for X.25 services. For architectural reasons, they are broadly **classified** into two **categories**: PC-to-host access (**terminal** emulation), as in token ring, to synchronous data **link** control (SDLC) hosts using host gateways; and client-server applications, such as distributed databases that are bridged or routed. For each class of applications, the traffic characteristics are discussed, it is explained how an efficient interconnection can be accomplished, and some insight is provided into how **LAN** internetworking devices (routers and gateways) function in an X.25 environment.

10/3,K/12 (Item 12 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

03842555 INSPEC Abstract Number: B91019682, C91023015

**Title: A framework for a national broadband (ATM/B-ISDN) network**

Author(s): Eng, K.Y.; Gitlin, R.D.; Karol, M.J.

Author Affiliation: AT&T Bell Lab., Holmdel, NJ, USA

Conference Title: IEEE International Conference on Communications ICC '90 Including Supercomm Technical Sessions. SUPERCOMM ICC '90 Conference Record (Cat. No.90CH2829-0) p.515-20 vol.2

Publisher: IEEE, New York, NY, USA

Publication Date: 1990 Country of Publication: USA 4 vol. xxx+1759

pp.

U.S. Copyright Clearance Center Code: CH2829-0/90/0000-0515\$01.00

Conference Sponsor: IEEE; US Telephone Assoc.; Telecommun. Ind. Assoc

Conference Date: 16-19 April 1990 Conference Location: Atlanta, GA, USA

Language: English

...Abstract: to remain much faster than switching speeds (thus packet switching at peak transmission rates needs to be avoided), the network architecture is a three-tier **hierarchy** composed of LANs (**local area networks**), network **nodes** and DACS (digital access and cross-connect systems). Access to the network is either through direct connection to a DACS or network node, or through the end-user's **LAN**, which has a gateway to a network node. Each network node is a high-performance ATM packet switch, which accepts input cells at a B-ISDN rate of 150 Mb/s and serves both as **LAN**-to-**LAN** interconnect and as a packet concentrator for traffic destined to other network nodes and LANs. To minimize the delay and simplify the implementation of gigabit...

10/3,K/13 (Item 13 from file: 2)

DIALOG(R)File 2:INSPEC

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03524922 INSPEC Abstract Number: B90003254, C90007489

**Title: Local networks: transmission lines**

Author(s): Fonsatti, V.

Journal: Automazione e Strumentazione vol.37, no.7-8 p.131-6

Publication Date: July-Aug. 1989 Country of Publication: Italy

CODEN: ATSZAS ISSN: 0005-1284

Language: Italian

Abstract: The article sets forth the fundamental principles on which **local area networks (LAN)**, normally used in industrial automation systems, are based. Explanations are also given of **connection** systems **linking** together several programmable logic units, programming and supervision **processors**, peripherals, etc., with special reference to their **classification**, as they may work on three different systems: one way, half duplex and full duplex. Reference is also made to coding technology, by considering the...

10/3,K/14 (Item 14 from file: 2)

DIALOG(R)File 2:INSPEC

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03248629 INSPEC Abstract Number: C88063866

**Title: Comparing parallel programming languages and architectures**

Author(s): Mariani, J.A.

Author Affiliation: Dept. of Comput., Lancaster Univ., UK

Conference Title: IEE Workshop on Parallel Processing and Control - The Transputer and other Architectures (Digest No.95) p.2/1-8

Publisher: IEE, London, UK

Publication Date: 1988 Country of Publication: UK 136 pp.

Conference Sponsor: IEE

Conference Date: 4-6 July 1988 Conference Location: Bangor, UK

Language: English

...Abstract: passing. The situations of both (a) parallel processes running on the same machine; (b) parallel processes running on different machines/processors; the machines will be **linked** either by buses (in the case of tightly coupled **processors**) or **local area networks** are considered. In **order** that parallel processes can cooperate, there has to be a flow of information between them; there has to be a communications medium. In case (a...

... be a shared memory area where values can be read/written. In case (b), messages will have to be formed and sent along the bus/**local area network**.

10/3,K/15 (Item 15 from file: 2)

DIALOG(R)File 2:INSPEC

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03180489 INSPEC Abstract Number: C88046881

**Title: Personal computer or terminal**

Journal: Sysdata vol.19, no.5 p.21

Publication Date: May 1988 Country of Publication: Switzerland

CODEN: SYSDDS ISSN: 0254-2226

Language: German

...Abstract: stand-alone use, and more suited to inexperienced users, whereas an intelligent terminal is more demanding but can yield higher performance. Tandberg TDV 2411 intelligent **terminals** have been installed, **connected** to a **hierarchical** network employing optical fibre **local area networks**, local computers running Unix, PTT telecommunication links, and Honeywell satellite computers as well as a mainframe host computer.

10/3,K/16 (Item 16 from file: 2)

DIALOG(R)File 2:INSPEC

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03139088 INSPEC Abstract Number: B88035146, C88029911

**Title: A multi-access protocol for local area networks with dynamic priorities and recovery mechanisms**

Author(s): Kiesel, W.M.

Author Affiliation: Siemens AG, Erlangen, West Germany

Conference Title: EFOC/LAN 86 Proceedings. Papers Presented at: The Fourth Annual European Fibre Optic Communications and Local Area Networks Exposition p.183-91

Editor(s): Fasano, D.; Kennelly, C.; Polishuk, P.

Publisher: Inf. Gatekeepers, Boston, MA, USA

Publication Date: 1986 Country of Publication: USA xiv+344 pp.

Conference Date: 23-27 June 1986 Conference Location: Amsterdam, Netherlands

Language: English

Abstract: Reports on a **local area network** operating under a CSMA-CD-type protocol with dynamic **priorities** (CSMA-CD-DP). Peripheral devices, like **terminals**, host computers or other servers are **connected** to a common transmission channel through network access stations in a clustered manner. This concept reduces the number of network access stations and enhances the...

10/3,K/17 (Item 17 from file: 2)

DIALOG(R)File 2:INSPEC

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02778323 INSPEC Abstract Number: C87002828

**Title: A simple bus local area network using collision-free access control**

Author(s): Namekawa, H.; Aoki, M.; Kishigami, T.

Author Affiliation: Dept. of Inf. Sci., Ibaraki Univ., Hitachi, Japan

Journal: Journal of the Faculty of Engineering, Ibaraki University  
no.33 p.193-204

Publication Date: 1985 Country of Publication: Japan

CODEN: IDKSAB ISSN: 0367-7389

Language: English

Abstract: Describes an implementation of a simple bus **local area network** which employs a distributed collision-free access control scheme. The control scheme uses control-wires in addition to a data bus to schedule the transmissions of each station. The stations with RS-232C interface can be **connected** easily to the network by using network **controllers**. The transmission **rate** of the network is 50 Kbit/sec. Details on the design of hardware and software for the network controllers are discussed.

10/3,K/18 (Item 18 from file: 2)

DIALOG(R)File 2:INSPEC

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02686474 INSPEC Abstract Number: C86034495

**Title: An overview of MAP lower layer protocols**

Author(s): Jayasumana, A.P.

Author Affiliation: Dept. of Electr. Eng., Colorado State Univ., Fort Collins, CO, USA

Conference Title: Proceedings of IECON '85. 1985 International Conference on Industrial Electronics, Control and Instrumentation (Cat. No.85CH2160-0) p.605-10 vol.2

Publisher: IEEE, New York, NY, USA

Publication Date: 1985 Country of Publication: USA 2 vol. 865 pp.

U.S. Copyright Clearance Center Code: CH2160-0/85/0000-0605\$01.00

Conference Sponsor: IEEE; Soc. Instrum. & Control Eng. Japan

Conference Date: 18-22 Nov. 1985 Conference Location: San Francisco, CA, USA

Language: English

Abstract: The Manufacturing Automation Protocol (MAP) is intended to establish a standard, based on the ISO-OSI reference model, for a factory **local-area network** to support communication among computers and other intelligent devices. The mechanical and electrical specifications of the IEEE 802.4 broadband token-passing standard are used...  
... physical layer is responsible for encoding and physically transferring messages between adjacent nodes. The data link layer, which consists of

media access control and logical **link** control sublayers, improves the error **rate** for messages moved between adjacent **nodes** . The MAP task force has recommended the use of the IEEE 802.4 token-passing channel-access scheme and the IEEE 802.2 link-level...

10/3,K/19 (Item 19 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

02674478 INSPEC Abstract Number: B86037496, C86029573

**Title: A packet-network support system for the MELCOM computer series**

Author(s): Shinzawa, M.; Dosaka, S.; Fujimagari, H.; Yoshida, M.; Kurohata, Y.

Journal: Mitsubishi Denki Giho vol.59, no.11 p.57-61

Publication Date: 1985 Country of Publication: Japan

CODEN: MTDNAF ISSN: 0369-2302

Language: Japanese

Abstract: Mitsubishi Electric has developed a horizontally distributed network system based on the international standard X25 packet that provides equal **priority links** between MELCOM computers and **terminal** equipment. In addition to **linking** a digital-data-exchange packet network and nonswitched lines into a wide-area network, the system can also incorporate a MELNET, the Corporation's **local -area network** . The authors introduce the features of the packet-network system and the methods employed in developing its support equipment.

10/3,K/20 (Item 20 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers...All rts. reserv.

02658738 INSPEC Abstract Number: B86030436, C86024297

**Title: The use of satellite channels for computer networking**

Author(s): Burren, J.W.

Author Affiliation: Rutherford Appleton Lab., Chilton, UK

Conference Title: Satellite Transmissions. Proceedings of an International Symposium (ESA SP-245) p.71-8

Publisher: ESA, Noordwijk, Netherlands

Publication Date: 1985 Country of Publication: Netherlands vii+201 pp.

Conference Sponsor: ESA; Austrian Solar & Space Agency; Forschungsgesellschaft Joanneum Graz

Conference Date: 25-27 Sept. 1985 Conference Location: Graz, Austria

Language: English

...Abstract: and Project Universe in computer networking via satellite is reviewed. In these experiments a broadcast satellite channel was used to provide wide area communication between **local area networks** at the sites involved. The requirements for this 'backbone' network function will be described and the effectiveness of a satellite in this role will be...

... will be outlined. A new high performance controller based on the use of two microprocessor systems used in a parallel configuration, one for the up- **link** and one for the down-**link** , will be described. This **controller** uses variable **rate** block encoding and drives a new variable rate burst modem.

10/3,K/21 (Item 21 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

02585029 INSPEC Abstract Number: C86009149

**Title: A comparison of receiver-initiated and sender-initiated adaptive load sharing**

Author(s): Eager, D.L.; Lazowska, E.D.; Zahorjan, J.



Author Affiliation: Dept. of Comput. Sci., Saskatchewan Univ., Saskatoon, Sask., Canada

Journal: Performance Evaluation Review vol.13, no.2, spec. issue.

p.1-3

Publication Date: Aug. 1985 Country of Publication: USA

CODEN: PEREDN ISSN: 0163-5999

U.S. Copyright Clearance Center Code: 0-89791-169-5/85/007/0001\$00.75

Conference Title: Proceedings of the 1985 ACM SIGMETRICS Conference on Measurement and Modeling of Computer Systems

Conference Sponsor: ACM

Conference Date: 26-29 Aug. 1985 Conference Location: Austin, TX, USA

Language: English

Abstract: Summary form only given. The authors represent locally distributed systems as collections of identical nodes, each consisting of a single processor. The nodes are **connected** by a **local area network** (e.g., an Ethernet). All **nodes** are subjected to the same average arrival **rate** of tasks, which are of a single type. In contrast to most previous papers on load sharing, this paper represents the cost of task transfer...

10/3,K/22 (Item 22 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

02549025 INSPEC Abstract Number: B85063288, C85050277

**Title: Centrenet-a high performance local area network**

Author(s): Ibbett, R.N.; Edwards, D.A.; Hopkins, T.P.; Cadogan, C.K.; Train, D.A.

Author Affiliation: Dept. of Comput. Sci., Manchester Univ., UK

Journal: Computer Journal vol.28, no.3 p.231-42

Publication Date: July 1985 Country of Publication: UK

CODEN: CMPJA6 ISSN: 0010-4620

Language: English

Abstract: Centrenet is a high performance **local area network** designed to satisfy the requirements of both closely knit multi-computer systems and communities of users spread across large campus areas. It uses high speed parallel switching **nodes** arranged in a tree-structured **hierarchy** with **connections** between **nodes** being implemented in optical fibre. Within each node is a network intelligence module which assists in the setting up of virtual calls across the network...

10/3,K/23 (Item 23 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

02492603 INSPEC Abstract Number: C85037429

**Title: Intel's Opennet**

Author(s): Criegee, T.

Journal: Mikrocomputer Zeitschrift no.5 p.46-8

Publication Date: May 1985 Country of Publication: West Germany

CODEN: MDMZDL ISSN: 0720-4442

Language: German

Abstract: Points out that despite the potentialities of LANs (**Local Area Networks**) little has been done to realise international installations: and the reasons for this include the adoption of system-specific and externally incompatible solutions together with...

... a local station user to all files of the complete network, independent of the operation system: and by means of the setting-up of virtual **connections** between individual **junctions** of the total network, a quasi, new **hierarchic** network file system can be set up. The basis of the new system is the ISO 7-layer model first propounded by ISO with their...

10/3,K/24 (Item 24 from file: 2)

DIALOG(R)File 2:INSPEC

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02340301 INSPEC Abstract Number: B84058356, C84049692

**Title: Bit-oriented coprocessor resolves incompatibilities of small and large networks**

Author(s): Madan, P.; Huang, W.; Kao, C.; Yu, A.

Author Affiliation: Exel Microelectronics Inc., San Jose, CA, USA

Journal: Electronic Design vol.32, no.15 p.155-66

Publication Date: 26 July 1984 Country of Publication: USA

CODEN: ELODAW ISSN: 0013-4872

Language: English

Abstract: A VLSI component that serves both **local area networks** and circle area networks has to reconcile conflicting objectives. These have been met by a bit-oriented communications coprocessor. Fabricated with a two layer metal...

... in two versions-the XL88C585 and the XL68C565 and will be housed in a 48-pin package. The chip consists of two processors: a **data-link controller** that can operate at a higher data **rate** of 4 Mbits/s and a channel **processor** (with a built in DMA controller) that works at bus clock rates of up to 10 MHz.

10/3,K/25 (Item 25 from file: 2)

DIALOG(R)File 2:INSPEC

(c) 1999 Institution of Electrical Engineers. All rts. reserv.

02241250 INSPEC Abstract Number: B84026560, C84021975

**Title: A new CSMA-CD protocol for local area networks with dynamic priorities and low collision probability**

Author(s): Kiesel, W.M.; Kuehn, P.J.

Author Affiliation: Dept. of Communications, Univ. of Siegen, Siegen, West Germany

Journal: IEEE Journal on Selected Areas in Communications vol.SAC-1, no.5 p.869-76

Publication Date: Nov. 1983 Country of Publication: USA

CODEN: ISACEM ISSN: 0733-8716

U.S. Copyright Clearance Center Code: 0733-8716/83/1100-0869\$01.00

Language: English

Abstract: This paper reports on the implementation of a **local area network (LAN)** operating under a new CSMA-CD protocol with dynamic **priorities (CSMA-CD-DP)**. User **terminals**, host computers, and other servers are **connected** to a common broad-band channel through N network access stations in a clustered manner. This concept reduces the number of network access stations and...

10/3,K/26 (Item 1 from file: 6)

DIALOG(R)File 6:NTIS

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2014980 NTIS Accession Number: AD-A326 116/1

**Algorithms and Software for Combined H2/Hoo Control**

(Final rept. 1 Apr 96-31 Mar 97)

Watson, L. T.

Virginia Polytechnic Inst. and State Univ., Blacksburg. Dept. of Computer Science.

Corp. Source Codes: 032784044; 411098

Report No.: AFOSR-TR-97-0191

26 Apr 97 87p

Languages: English

Journal Announcement: GRAI9721

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fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A06/MF A01

This objective of this project were (1) to prove convergence theorems for probability-one homotopy methods applied to H2 and **combined** H2/H to infinity optimal model **order** reduction and **controller** synthesis problems, and (2) to develop a robust, fixed-structure MATLAB toolbox. This report consist of a paper on convergence theory for homotopy control algorithms, and a user's guide for a MATLAB toolbox. The toolbox is available on the **World Wide Web** at URL <http://www.cs.vt.edu/ltw/toolbox/>.

10/3,K/27 (Item 2 from file: 6)

DIALOG(R)File 6:NTIS

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1672558 NTIS Accession Number: AD-P007 620/8

**Application of Ultrafast Gates to a Soliton Ring Network**

Soccolich, C. E. ; Islam, M. N. ; Hong, B. J. ; Chbat, M. ; Sauer, J. R.

A.T. and T. Bell Labs., Holmdel, NJ.

Corp. Source Codes: 092566000; 416667

22 May 92 4p

Languages: English

Journal Announcement: GRAI9222

This article is from 'OSA Proceedings of the Topical Meeting on Nonlinear Guided-Wave Phenomena Held in 2-4 September 1991. Cambridge, England United Kingdom. Volume 15', AD-A253 471, p366-369.

Order this product from NTIS by: phone at 1-800-553-NTIS (U.S. customers); (703)605-6000 (other countries); fax at (703)321-8547; and email at orders@ntis.fedworld.gov. NTIS is located at 5285 Port Royal Road, Springfield, VA, 22161, USA.

NTIS Prices: PC A01/MF A01

Descriptors: Solitons; \*Optical circuits; \*Optical communications; \*Logic circuits; Data **rate** ; **Nodes** ; Packet switching; Rings; Routing; **Local area networks** ; Data **links** ; Fiber optics; Transmission lines

10/3,K/28 (Item 3 from file: 6)

DIALOG(R)File 6:NTIS

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1252982 NTIS Accession Number: PB86-202595

**Characterization of Traffic on NBSNET**

(Final rept)

Stokesberry, D. P.

National Bureau of Standards, Gaithersburg, MD. Systems and Network Architecture Div.

Corp. Source Codes: 081914009

1984 40p

Languages: English Document Type: Journal article

Journal Announcement: GRAI8619

Pub. in Proceedings of a Workshop on Performance and Evaluation of Local Area Networks, Worcester, Massachusetts, March 24-25, 1983, p63-102 1984.

NTIS Prices: Not available NTIS

The paper analyzes the traffic on a **local area network** in its third year of operation at the National Bureau of Standards. NBSNET is a one megabit per second broadcast network that uses a carrier sense multiple access with collision detection (CSMA/CD) protocol. It is approximately four kilometers in length. The network has over 250 user devices **connected** to it; these devices fall into six different **categories** -- main computer, minicomputer, microcomputer, word **processor** , graphics **terminal** and ordinary terminal. Over 2 million packets were observed during 39 data collection runs. One fourth of the packets and one third of the data...

10/3,K/29 (Item 1 from file: 233)  
DIALOG(R)File 233:Microcomputer Abstracts  
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00364526 94DC10-103

**LAN connectivity -- Vendors are focusing on products that integrate LAN and SNA traffic**

Data Communications , October 21, 1994 , v23 n15 p61-82, 21 Page(s)  
ISSN: 0363-6399

Introduces a buyer's guide to **LAN connectivity** products. Features capsule descriptions of products in the following **categories** : gateways and **controllers** ; fax gateways; **terminal** emulators and host access software; **LAN Internet** access; channel extenders with **LAN** connectivity; host-to-**LAN** print connectivity; WAN access software; terminal servers; and SLDC converters. Includes a product trend report and pricing information. Includes a diagram. (dpm)

10/3,K/30 (Item 2 from file: 233)  
DIALOG(R)File 233:Microcomputer Abstracts  
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00348252 94IW05-419

**Relay/PC Gold for Windows version 6.0**

Rash, Wayne; Garza, Victor R; Marcus, Ann M  
InfoWorld , May 30, 1994 , v16 n22 p77, 79, 81+, 5 Page(s)  
ISSN: 0199-6649  
Company Name: Relay Technology  
Product Name: Relay/PC Gold for Windows

... of Vienna, VA (800, 703). Runs on IBM PC compatibles with 5MB hard disk space and Windows. Rates Relay/PC Gold as excellent in the **categories** of: **terminal** emulation, covering nearly every major **terminal** available; scripting, and **connectivity** and reliability, calling it particularly robust in maintaining connections despite interruptions; network access. Also claims that Relay/PC Gold has the most complete documentation of any of the tested packages. Further notes that this program is highly customizable; it provides support for over 150 modems, as well as for **LAN** communications and a variety of other mainframe access options, including 3270 coaxial adapters; and technical support is very good. However, says Relay/PC Gold cannot...

10/3,K/31 (Item 1 from file: 103)  
DIALOG(R)File 103:Energy SciTec  
(c) 1999 Contains copyrighted material. All rts. reserv.

04287912 JP-97-0H0731; EDB-98-048327

**Title: Bulb turbine-generators for Bailongtan power plant, China**

Original Title: Chugoku Bailongtan hatsudenshomuke daiyoryo bulb suisha hatsudenki

Author(s): Takahashi, M.; Yoshii, K.; Kawaji, T. (Fuji Electric Co. Ltd., Tokyo (Japan))

Source: Fuji Jiho (Fuji Electric Journal) v 70:9. Coden: FUJIAS ISSN: 0367-3332

Publication Date: 10 Sep 1997 p 37-41

Language: Japanese

...Abstract: bearing supporting system employed the dual-bearing overhang system. The generator cooling system used a double shell cooling system. The control equipment consists of a **hierarchical** control system using a unit **controller** and a master station, which are **linked** together with **LAN** using optical fiber cables. 14 figs., 1 tab.

10/3,K/32 (Item 1 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)1999 Japan Science and Tech Corp(JST). All rts. reserv.

01580042 JICST ACCESSION NUMBER: 92A0212078 FILE SEGMENT: JICST-E

**Special issue : with the aim of upgrading of metal-mold making.**

**Communication network which realizes efficiency upgrading of metal-mold machining.**

SORIMACHI MASAYUKI (1); TACHIKAWA NOBUYOSHI (1); HATANAKA TOORU (1)

(1) DikonJapan

Kikai to Kogu(Tool Engineer), 1992, VOL.36,NO.3, PAGE.52-57, FIG.4, TBL.1

JOURNAL NUMBER: G0120AAZ ISSN NO: 0387-1053

UNIVERSAL DECIMAL CLASSIFICATION: 621:658.566.01

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Commentary

MEDIA TYPE: Printed Publication

...ABSTRACT: ITS2000 with coaxial cable, it is possible to connect up to 255 units including the server. Each of the following items is explained : network, server, **terminal** unit, example of use, **connection** with higher-order **LAN** , and, development of tool management system by the network.

10/3,K/33 (Item 2 from file: 94)

DIALOG(R)File 94:JICST-EPlus

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01437096 JICST ACCESSION NUMBER: 91A0810677 FILE SEGMENT: JICST-E

**Special Issue on LAN: High Speed, Multimedia, and Reliability. IVDLAN**

**Standardization and Development.**

SHIMIZU H (1); WATANABE K (2); KATSURA Y (3); TSURUTA K (4); ABE T (5)

(1) NEC Corp., Abiko-shi, JPN; (2) NEC Research Inst. Inc., New Jersey, USA

; (3) NEC America, Inc., New York, USA; (4) NEC Engineering, Ltd.,

Abiko-shi, JPN; (5) NEC Communications Systems, Ltd., Abiko-shi, JPN

IEICE Trans(Inst Electron Inf Commun Eng), 1991, VOL.E74,NO.9,

PAGE.2696-2702, FIG.9, REF.13

JOURNAL NUMBER: F0699BCQ ISSN NO: 0917-1673

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654

LANGUAGE: English COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

...ABSTRACT: providing person-to-person communication as well as improving office work efficiency, demands for multimedia communication services have increased. This paper discusses Integrated Voice/Data **LAN** (IVDLAN) for handling multimedia communications. First, the IEEE 802.9 IVDLAN working group activities on a user access network which dedicatedly provides a multi-megabit...

...IVDLAN product APEX 8000/10 which meets the IEEE 802.9 architecture. A set of an ISDN terminal and an IEEE 802.3 terminal are **connected** to the **node** through a **terminal** adapter. The line **rate** is 4.096Mbit/s and the maximum line length is 600m. The IVDLAN node has an 128Mbit/s burst switching module and a 64Mbit/s...

10/3,K/34 (Item 1 from file: 99)

DIALOG(R)File 99:Wilson Appl. Sci & Tech Abs

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1747547 H.W. WILSON RECORD NUMBER: BAST89005369

**Air Force selects Computer Sciences Corp. to develop information processing system**

Aviation Week & Space Technology v. 130 (Jan. 23 '89) p. 51-2

DOCUMENT TYPE: Feature Article ISSN: 0005-2175

...ABSTRACT: and deploy the entire IPS network by 1994. The nodes will be linked into MAC's Global Decision Support System (GDSS), a series of seven **local area networks** that automates the tracking of MAC aircraft and crew, though not data entry. In order to prevent operators from gaining access to **classified** information in the higher-level GDSS **nodes** once the IPS nodes are **linked** into the system, the Defense Department plans to use the GDSS system as the basis for developing a prototypical security system.

File 275:Computer Database(TM) 1983-1999/Jun 10  
(c) 1999 The Gale Group  
File 674:Computer News Fulltext 1989-1999/May W5  
(c) 1999 IDG Communications  
File 16:PROMT(R) 1972-1999/Jun 10  
(c) 1999 The Gale Group  
File 15:ABI/INFORM(R) 1971-1999/Jun 09  
(c) 1999 UMI  
File 148:Trade & Industry Database 1976-1999/Jun 10  
(c) 1999 The Gale Group  
File 636:Newsletter DB(TM) 1987-1999/Jun 10  
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File 624:McGraw-Hill Publications 1985-1999/Jun 08  
(c) 1999 McGraw-Hill Co. Inc  
File 9:Business & Industry(R) Jul 1994-1999/Jun 10  
(c) 1999 Resp. DB Svcs.  
File 88:BUSINESS A.R.T.S. 1976-1999/Jun 10  
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File 47:Magazine Database(TM) 1959-1999/Jun 10  
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File 75:Management Contents(R) 86-1999/May W5  
(c) 1999 The Gale Group  
File 647:CMP Computer Fulltext 1988-1999/May W5  
(c) 1999 CMP

Set	Items	Description
S1	1648854	CATEGORI? OR RANK OR PRIORIT? OR HIERARCH? OR CLASSIF?
S2	2075146	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	4373866	LINK? OR CONNECT? OR JOIN OR COMBINE? OR BACK()LINK? OR BA- CKLINK?
S4	1306296	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?)
S5	2176570	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	4560528	CITATION? OR DOCUMENT? OR REPORT? ?
S7	2140	WEIGHTED(7N)SUM
S8	2	(S1(5N)S2) (S) (S3(5N)S4) (S)S5
S9	163	(S1(5N)S2) (S)S3(S)S5
S10	163	S1(5N)S2(5N)S3(5N)S5
S11	5219	S1(3N)S2
S12	196	S11(5N)S3
S13	0	S12(5N)S5
S14	9	S12(S)S5
S15	7	RD (unique items)

15/3,K/1 (Item 1 from file: 275)  
DIALOG(R) File 275:Computer Database(TM)  
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01599591 SUPPLIER NUMBER: 13749196 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Multiprotocol routers: an overview. (Cover Story) (Buyers Guide)**  
Flanagan, Patrick  
Telecommunications, v27, n4, p19(4)  
April, 1993  
DOCUMENT TYPE: Buyers Guide ISSN: 0278-4831 LANGUAGE: ENGLISH  
RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 2859 LINE COUNT: 00228

... Wellfleet's line can go as high as \$180,000 for a fully loaded box.  
At the mid and low ends, Wellfleet offers three product **categories**.  
The **Link Node** is an expandable platform for small to medium-sized  
network sites and supports up to 16 **LAN** and 16 WAN connections through  
four expansion processors. The Feeder Node is for small network sites with  
limited growth and allows a maximum of two **LAN** and two WAN connections.  
For remote offices, the Access Feeder Node is a packaged solution offering  
one Ethernet connection and two synchronous connections. The lowest...

15/3,K/2 (Item 2 from file: 275)  
DIALOG(R) File 275:Computer Database(TM)  
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01167979 SUPPLIER NUMBER: 05069865  
**Northern 'wiring up': joins IBM, others, in premised cabling arena.**  
(Northern Telecom Inc)  
Feldman, Robert  
MIS Week, v7, n51, p1(2)  
Dec 22, 1986  
ISSN: 0199-8838 LANGUAGE: ENGLISH RECORD TYPE: ABSTRACT

...ABSTRACT: 1987, Northern Telecom Inc will introduce its Integrated  
Building Distribution Network (IBDN) 'universal' system for wiring new  
buildings or rewiring old ones. IBDN offers a **hierarchical** star topology  
of **nodes** and **links**, integrates twisted copper and fiber-optic wire, and  
will work on already installed 24-gauge twisted copper wiring, offers a low  
cost of \$250 to...

...IBDN will also support 20MB-per-second Ethernet systems with fiber-optic  
cable and Northern Telecom's own long-promised Meridian 2.56MB-per-second  
**local area network** up to 2,000 feet. IBDN will be sold directly to  
national accounts and through Northern Telecom distributors.

15/3,K/3 (Item 1 from file: 16)  
DIALOG(R) File 16:PROMT(R)  
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01530230  
**Northern 'wiring up'.**  
MIS WEEK December 22, 1986 p. 1,16

... Building Distributing Network (IBDN) in 2/87. IBDN will introduce a  
'universal' system for wiring new buildings and rewiring old ones. In IBDN,  
**nodes** and **links** are arranged in a **hierarchical** star topology. **Nodes**  
serve as the network interfaces to a telephone company or as access points  
for such devices as PBXs, multiplexers, **LAN** interface units, terminals,  
micros, minis and mainframe terminal controllers. Northern Telecom will  
also introduce its Meridian system in 1987. Meridian runs a  
2.56-Mbps-to-the-terminal **LAN** on an integrated voice/data system that  
uses twin 40 Mbps buses. The firm will also introduce its packet transport  
equipment in 1987. Article discusses...



15/3,K/4 (Item 1 from file: 15)  
DIALOG(R)File 15:ABI/INFORM(R)  
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01363069

00-14056

**Information technology in manufacturing**

Anonymous

Manufacturing Systems v14n12 PP: 54-78 Dec 1996

ISSN: 0748-948X JRNL CODE: MFS

WORD COUNT: 9210

...TEXT: operating systems and applications-can communicate with one another. HyperText Markup Language (HTML) lets the computers display the accessed information in graphical pages.

Originally, the **Internet** was a scheme sponsored by the U.S. Defense Department to link its labs with American universities in an ingenious and robust way. Instead of **connecting** computers in a **hierarchical**, trunk-and-**branch** fashion-e.g., as with a city's electric or water-supply network-the **Internet** ties computers together in a decentralized system, analogous to a grid of streets crisscrossing a city. As a message leaves a computer in, say, Boston...

15/3,K/5 (Item 2 from file: 15)  
DIALOG(R)File 15:ABI/INFORM(R)  
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01193264

98-42659

**Sun study finds the 'Net saves money**

Rendleman, John

CommunicationsWeek n599 PP: 5 Mar 4, 1996

ISSN: 0746-8121 JRNL CODE: CWE

ABSTRACT: Companies that use the **Internet** as a corporate data network can save 23% to 50% of the cost of operating a traditional leased private-line network, according to a recent...

... Microsystems Inc. The estimated savings are for a typical 10-node corporate data network and account for both high-priority corporate backbone networks and lower-**priority** networks **connecting branch** offices. ...

15/3,K/6 (Item 3 from file: 15)  
DIALOG(R)File 15:ABI/INFORM(R)  
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00334930

86-35344

**Charting Their Courses**

Haugdahl, J. Scott

Computerworld v20n37A PP: 18-22 Sep 17, 1986

ISSN: 0010-4841 JRNL CODE: COW

...ABSTRACT: forth with its Cabling System and the Token-Ring Network. AT&T's PDS is a multifunctional distribution system, and ISN's architecture consists of **nodes** and concentrators **hierarchically connected** by trunks. IBM's access control technique is distributed, while AT&T's is more centralized. AT&T does have a distributed type of **LAN** for personal computers and low-end 3B computers -- Starlan. As IBM's announced host attachments become available, the System/36 will be supported on the...

15/3,K/7 (Item 1 from file: 148)  
DIALOG(R)File 148:Trade & Industry Database  
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03881704      SUPPLIER NUMBER: 07079790      (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Spreadsheet will comply with CALS. (Computer-Aided Acquisition Logistics  
and Support) (product announcement)**  
Hosinski, Joan M.  
Government Computer News, v8, n4, p1(2)  
Feb 20, 1989  
DOCUMENT TYPE: product announcement      ISSN: 0738-4300      LANGUAGE:  
ENGLISH      RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 642      LINE COUNT: 00050

...ABSTRACT: in ascending or descending order. System Industries Inc introduces the SI2480 (\$85,000 to 250,000), an IBM 3480-compatible cartridge tape drive that can **connect** to DEC's **Hierarchical Storage Controller** 50 and HSC70 controllers used on VAXclusters. CC:Mail Inc introduces a gateway (\$2,500 to \$3,000) that allows cc:Mail **local area network** users to send or receive files transparently from Apple Computer Inc Macintoshes, Personal Computers and VAXes.

File 348:European Patents 1978-1999/Jun W22  
(c) 1999 European Patent Office

Set	Items	Description
S1	395325	CATEGORI? OR RANK OR PRIORIT? OR RATE OR HIERARCH? OR ORDER OR CLASSIF?
S2	210332	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	425852	LINK? OR CONNECT? OR JOIN OR COMBINE? OR BACK()LINK? OR BA- CKLINK?
S4	16427	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR LIBRARY
S5	29546	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	707844	CITATION? OR DOCUMENT? OR REPORT? ?
S7	946	WEIGHTED(7N)SUM
S8	2975	(S1(7N)S2) (10N)S3
S9	49	S8(S)S5
S10	2	S9(S)S4
S11	19	S9 AND S4
S12	0	NODE?(S)RANK?(S)LINK?(S)DATABASE?
S13	71	NODE? AND RANK? AND LINK? AND DATABASE?
S14	211	NODE? AND RANK? AND (LINK? OR BACKLINK? OR BACK()LINK?)
S15	140	S14 NOT S13
S16	0	NODE?(S)RANK?(S)LINK?(S)S5
S17	17	NODE?(S)RANK?(S)LINK?

17/5,K/1

DIALOG(R)File 348:European Patents

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00999299

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**A method and system for suggesting related documents**

**Ein Verfahren und System um ähnliche Dokumente vorzuschlagen**

**Un procede et systeme pour proposer des documents relies**

PATENT ASSIGNEE:

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AT;BE;CH;CY;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

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PATENT (CC, No, Kind, Date): EP 902380 A2 990317 (Basic)

APPLICATION (CC, No, Date): EP 98307343 980910;

PRIORITY (CC, No, Date): US 929426 970915

DESIGNATED STATES: AT; BE; CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI;

LU; MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G06F-017/30;

ABSTRACT EP 902380 A2

The document reading system passively analyzes a document to generate margin or end notes of references to other documents that relate to annotated passages in the document or to the entire document. The invention is responsive to the annotation of a document to passively generate a query that retrieves documents that have similar content to the annotated passage. The retrieved documents are available to the reader through selectable links placed in the margin near the annotation. Additionally, the invention provides end notes with links to documents that are similar in content to the overall content of the annotated document. The invention assists the reader by passively generating selectable links to related documents to assist the user in relating the new document to previously read material.

ABSTRACT WORD COUNT: 126

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 990317 A2 Published application (Alwith Search Report

;A2without Search Report)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9911	463
SPEC A	(English)	9911	2587
Total word count - document A			3050
Total word count - document B			0
Total word count - documents A + B			3050

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

...SPECIFICATION Furuta et al. Proceedings of Hypertext '89, November 1989, Pittsburgh, PA, ACM Press, incorporated herein by reference in its entirety.

The HieNet System uses inter-**node** similarity measures to create hypertext **links** based on **links** previously created by the hypertext author. This system is described in "Hienet: A User-Centered Approach for Automatic **Link** Generation", D.T. Chang, Proceedings of Hypertext '93, November 1993, Seattle, WA, ACM Press, incorporated herein by reference

in its entirety. When the author creates a **link** from a document A to a document B, the system automatically adds **links** from all documents similar to document A to all documents similar to document B. Anchors for these automatically-generated **links** are represented by icons in the margin of the various documents. Clicking on an icon displays a pop-up menu that contains a list of possible destination documents that are **ranked** by relevance to the query. Again, this system relies on **links** previously created by the author.

Other conventional systems relate to hypertext-like ways of displaying search results. HieNet displays automatic links in the margin, but...

17/5,K/2

DIALOG(R)File 348:European Patents

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00914404

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**Hyper-text document preparing apparatus**

**Hypertext-Dokumentaustellungssystem**

**Systeme de preparation de documents hypertextes**

PATENT ASSIGNEE:

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Kadoma-shi Osaka, (JP), (applicant designated states:

AT;BE;CH;DE;DK;ES;FI;FR;GB;GR;IE;IT;LI;LU;MC;NL;PT;SE)

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Sakushima, Kazuo, 904-1-304, Mizonoguchi, Takatsu-ku, Kawasaki, (JP)

Kawaguchi, Kyoko, 705-1-270, Oyama, Matsudo-shi, Chiba-ken, (JP)

Nakanishi, Yoshiaki, 2-4-10-305, Matsunoki, Suginami-ku, Tokyo, (JP)

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PATENT (CC, No, Kind, Date): EP 834820 A2 980408 (Basic)

EP 834820 A3 990414

APPLICATION (CC, No, Date): EP 97116976 970930;

PRIORITY (CC, No, Date): JP 96261515 961002

DESIGNATED STATES: AT; BE; CH; DE; DK; ES; FI; FR; GB; GR; IE; IT; LI; LU;  
MC; NL; PT; SE

INTERNATIONAL PATENT CLASS: G06F-017/30;

ABSTRACT EP 834820 A2

Contents of each of nodes indicating a plurality of hyper-text documents are prepared and revised in a node managing unit as node information. A connection-relationship between two nodes is established and revised for each of the nodes in a hierarchy structure managing unit as hierarchy structure information, and a hierarchy structure of the nodes is established. In this hierarchy structure, one node ranked to the top level is set as a parent node, and the other nodes are set to child nodes. Thereafter, a plurality of hyper-text documents arranged in the hierarchy structure are prepared from the node information and the hierarchy structure information. Therefore, because the contents of each node is managed in dependence of the preparation of the hierarchy structure, the hyper-text documents arranged in the hierarchy structure can be easily prepared.

ABSTRACT WORD COUNT: 135

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 980408 A2 Published application (Alwith Search Report  
;A2without Search Report)

Examination: 980408 A2 Date of filing of request for examination:  
970930

Search Report: 990414 A3 Separate publication of the European or  
International search report

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9815	1483

SPEC A	(English)	9815	9880
Total word count - document A			11363
Total word count - document B			0
Total word count - documents A + B			11363

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...SPECIFICATION production information shown in Fig. 12 is produced in the link information automatic producing unit;

Fig. 14 shows an example of a hierarchy structure of **nodes** and **link** automatic production information determined in cases where a user selects connection type information "jtype Headline and **Ranking**";

Fig. 15 shows a plurality of hyper-text documents indicated by hyper-text expression information obtained in cases where the link automatic production information shown in Fig. 14 is produced in the link information automatic producing unit;

Fig. 16 shows an example of a hierarchy structure of **nodes** and **link** automatic production information determined in cases where a user selects connection type information "jtype **Ranking**";

Fig. 17 shows a plurality of hyper-text documents indicated by hyper-text expression information obtained in cases where the link automatic production information shown...the user can refer to any one among the child nodes as a referential node.

Fig. 14 shows an example of a hierarchy structure of **nodes** and **link** automatic production information determined in cases where a user selects connection type information "jtype Headline and **Ranking**", and Fig. 15 shows a plurality of hyper-text documents indicated by hyper-text expression information of the hyper-text document preparing unit 35 obtained in cases where the **link** automatic production information shown in Fig. 14 is produced in the **link** information automatic producing unit 34.

As shown in Fig. 14, when a user selects connection type information "jtype Headline and **Ranking**" on condition that node...the hyper-text document preparing unit 35.

Accordingly, the user can easily obtain the hierarchy structure of the group of hyper-text documents in which **linking** relationships among the hyper-text documents are automatically prepared by selecting the connection type information "jtype Headline and **Ranking**". Also, in cases where the user selects connection type information "jtype Headline and **Ranking**" displayed on the displaying unit 19 by inputting a **link** automatic production information selecting instruction to the receiving unit 33, when the user selects one child **node** listed in the index information, the user can refer to any one among the child **nodes** as a referential **node**, and the user can refer to the other child **nodes** one after another.

Fig. 16 shows an example of a hierarchy structure of **nodes** and **link** automatic production information determined in cases where a user selects connection type information "jtype **Ranking**", and Fig. 17 shows a plurality of hyper-text documents indicated by hyper-text expression information of the hyper-text document preparing unit 35 obtained in cases where the **link** automatic production information shown in Fig. 16 is produced in the **link** information automatic producing unit 34.

As shown in Fig. 16, when a user selects connection type information "jtype **Ranking**" on condition that node information of...

...the hyper-text document preparing unit 35.

Accordingly, the user can easily obtain the hierarchy structure of the group of hyper-text documents in which **linking** relationships among the hyper-text documents are automatically prepared by selecting the connection type information "jtype **Ranking**". Also, in cases where the user selects connection type information "jtype **Ranking**" displayed on the displaying unit 19, the user can refer to the **nodes** one after another in the **ranking** order.

(Third Embodiment)

Fig. 18 is a block diagram of a hyper-text document preparing apparatus according to a third embodiment of the present invention...

- ...CLAIMS produced by the hierarchy structure managing means and the link information.
4. A hyper-text document preparing apparatus according to claim 3 in which one **node** **ranked** to the top level in the hierarchy structure is classified as a parent **node** in the hierarchy structure managing means, the other **nodes** are classified as child **nodes** in the hierarchy structure managing means, each piece of **link** automatic production information is composed of the connection type information indicating a connection-relationship between the parent **node** and a group of child **nodes**, an index template indicating a list of child **nodes**, an index producing rule indicating the number of child **nodes** existing in the list, a function button template indicating a list of function buttons respectively indicating a **linking** relationship, and a function button producing rule indicating one or more types of function buttons allocated to each child **node**, the anchor information allocated to the parent **node** is the list of child **nodes**, and the anchor information allocated to each child **node** is one or more types of function buttons.
  5. A hyper-text document preparing apparatus according to claim 3 in which each piece of **node** information produced by the **node** managing means includes title information indicating a title of a **node** corresponding to the **node** information, one **node** **ranked** to the top level in the hierarchy structure is classified as a parent **node** in the hierarchy structure managing means, the other **nodes** are classified as child **nodes** in the hierarchy structure managing means, the anchor information allocated to the parent **node** is an index of one or more titles of child **nodes** **linked** to the parent **node** in the **linking** relationships, and the title information of the child **nodes** **linked** to the parent **node** are attached to the child **nodes** by the **link** information automatic producing means.
  6. A hyper-text document preparing apparatus according to claim 5 in which an index information changing instruction indicating a change ...

17/5,K/3

DIALOG(R)File 348:European Patents

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00885411

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**Method for sequencing computer instruction execution in a data processing system**

**Verfahren zum Bestimmen der Ausführungsreihenfolge von Rechnerbefehlen in einem Datenverarbeitungssystem**

**Methode pour determiner la sequence d'execution d'instructions dans un systeme de traitement de donnees**

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PATENT (CC, No, Kind, Date): EP 810523 A2 971203 (Basic)

APPLICATION (CC, No, Date): EP 97107004 970428;

PRIORITY (CC, No, Date): US 647863 960515

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G06F-009/45;

ABSTRACT EP 810523 A2

A method and apparatus for sequencing computer instructions in memory (24) to provide for more instruction efficient execution by a central processing unit (CPU) (22) begins by executing the computer instructions via the CPU (22) and creating a trace file (FIG. 2) in memory (24). The

trace file is then scanned using a window size greater than two (i.e., more than two instructions or basic blocks/ groups of instructions are selected as each window) and correlations are determined between several pairs of instructions in each window (FIGs. 9 and 10). The correlations obtained by the window procedure are then analyzed (FIG. 11) to determine an efficient ordering of computer instructions for subsequent execution by any target CPU.

ABSTRACT WORD COUNT: 118

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 971203 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Change: 980114 A2 Representative (change)  
Withdrawal: 990317 A2 Date on which the European patent application  
was withdrawn: 990118

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9711W4	1255
SPEC A	(English)	9711W4	19949
Total word count - document A			21204
Total word count - document B			0
Total word count - documents A + B			21204

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...SPECIFICATION in Step 1576. Otherwise, the edge is an SESE/SEZE chain and the method continues with Step 1578.

Step 1578 starts a walk down each **link** L in the SESE/SEZE chain. What has to be done first is to carry out the analysis for all Superedges internal to the **link** L. In Step 1580, the next Superedge e is selected from **link** L. The method of FIG. 38 is then invoked (recursively) on this edge in step 1582, resulting in an evaluation of the primary P(e) and secondary S(e) **node** chains for Superedge e. In Step 1584, if another Superedge is available, the method repeats the invocation as described starting with Step 1580, while if...

...the method continues with Step 1586. By the time Step 1586 has been evaluated, every Superedge e in L has had its primary and secondary **node** chains determined. In Step 1586, the best primary path from input to output is found using the method described in FIG. 39. This primary path ...

...the first, the basic block which is entered by the incoming edge to L has no back edge entering it. In this case, the first **node** to be added is determined by the CTR values relating the alternatives to the previous **nodes**. Specifically, if **links** corresponding to index values i1 and i2 have already been added to the chain, the index value i3 is that corresponding to the current **link**, and index values corresponding to the remaining **links** are i4 and i5, the **rank** for each candidate **node** i3 would be where the sum is over the following index values only; in this case over i4 and i5. The values for i1 and i2 are those chosen from the earlier **links** in this Superedge which have already been laid out. On the other hand, if there is a back edge, then the first **node** to be added is determined entirely by FIG. 39, since there is no index value associated with this **link** L.

Once Step 1586 has determined the primary path P(L) for link L, the Step 1588 determines the best secondary sequence(s) which may...

17/5,K/4

DIALOG(R)File 348:European Patents

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00839561

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Hyper-text document preparing apparatus

Hypertext-Dokumentvorbereitungsgerat

Dispositif de preparation de documents hypertextes



PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 777189 A2 970604 (Basic)  
EP 777189 A3 970709  
EP 777189 B1 990421

APPLICATION (CC, No, Date): EP 96308663 961129;

PRIORITY (CC, No, Date): JP 95314471 951201

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30;

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 970604 A2 Published application (Alwith Search Report  
;A2without Search Report)

Examination: 970604 A2 Date of filing of request for examination:  
961220

Search Report: 970709 A3 Separate publication of the European or  
International search report

Examination: 970903 A2 Date of despatch of first examination report:  
970717

Grant: 990421 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9916	889
CLAIMS B	(German)	9916	737
CLAIMS B	(French)	9916	1086
SPEC B	(English)	9916	6844

Total word count - document A 0

Total word count - document B 9556

Total word count - documents A + B 9556

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...SPECIFICATION a predetermined order for each service and add or delete one or more nodes to/from one service in a renewal operation,  
the inner-service **link** processing unit 401 for preparing a plurality of inner-service **links** (or buttons) to serially connect the **nodes** placed in the same service in the **ranked** order according to the service structural information, adding or deleting one or more inner-service **links** to/from one service in the renewal operation on condition that a layout of the **nodes** in the renewed service is predetermined to serially arrange the **nodes** in the **ranked** order,  
the service storing unit 103, the inter-service link processing unit 104, the inter-service link information storing unit 105, the hyper-text document...predetermined order for each service and add or delete one or more child nodes to/from one service in a renewal operation,  
the inner-service **link** processing unit 401 for preparing a plurality of inner-service **links** (or buttons) to connect the parent **node** and each of the child **nodes** placed in the same service and serially connect the child **nodes** in the **ranked** order according to the service structural information, adding or deleting one or more inner-service **links** to/from one service in the renewal operation on condition that a layout of the child **nodes** in the renewed service is predetermined to serially arrange the child **nodes** in the **ranked** order,  
the service storing unit 103, the inter-service link processing unit 104, the inter-service link information storing unit 105, the hyper-text document...

17/5,K/5

DIALOG(R)File 348:European Patents

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00794553

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Optimization apparatus for removing hazards by arranging instruction order  
Optimierungsgerat zum Entfernen von Gefahren durch Arrangierung der  
Befehlsreihenfolge

Appareil d'optimisation pour enlever des dangers par l'arrangement de  
l'ordre des instructions

PATENT ASSIGNEE:

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PATENT (CC, No, Kind, Date): EP 740251 A2 961030 (Basic)

EP 740251 A3 970611

APPLICATION (CC, No, Date): EP 96302868 960424;

PRIORITY (CC, No, Date): JP 95104300 950427

DESIGNATED STATES: DE; FR; GB; NL

INTERNATIONAL PATENT CLASS: G06F-009/45;

ABSTRACT EP 740251 A2

An optimization apparatus is provided for removing hazards from a program by rearranging instructions for each program segment. The apparatus comprises: a Directed Acyclic Graph (DAG) generating means for generating DAGs for each program segment; a hazard marking means for marking hazard-including combinations of a parent instruction and a child instruction in the DAGs for hazard; and a rearranging means for rearranging the instructions for each program segment so that instructions are inserted between the instructions of each marked combination, wherein the inserted instructions do not destroy values stored in resources used by the instructions of the marked combination.

ABSTRACT WORD COUNT: 117

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 961030 A2 Published application (Alwith Search Report  
;A2without Search Report)

Search Report: 970611 A3 Separate publication of the European or  
International search report

Examination: 970903 A2 Date of filing of request for examination:  
970707

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
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CLAIMS A	(English)	EPAB96	7572
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SPEC A	(English)	EPAB96	9300
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Total word count - document A	16872
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Total word count - document B	0
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Total word count - documents A + B	16872
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...SPECIFICATION MOV 50,D1" have been output already.

1-4:

Fig.11 is a sub-flowchart for step S3 of Fig.9. At step S3, instruction **nodes** of a DAG are selected with their **ranks** by detecting a **link** including a hazard.

At step p1, it is judged whether a hazard exists between a candidate instruction node and its parent instruction node: if exists...

17/5,K/6

DIALOG(R)File 348:European Patents

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00727541

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**Dynamic window sizing in a data network**

**Dynamische Fensterbestimmung in einem Datennetzwerk**

**Prise des dimensions d'une fenetre dynamique dans un reseau de donnees**

**PATENT ASSIGNEE:**

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**LEGAL REPRESENTATIVE:**

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PATENT (CC, No, Kind, Date): EP 687090 A2 951213 (Basic)

APPLICATION (CC, No, Date): EP 95112656 901121;

PRIORITY (CC, No, Date): US 443975 891130; US 607831 901108

DESIGNATED STATES: DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: H04L-012/56;

**ABSTRACT EP 687090 A2**

A method for use in a high-speed virtual circuit digital network for resizing windows of virtual circuits in nodes of the network. The resizing of a virtual circuit's window is initiated by an input router at an edge of the digital network. When the input router determines that resizing is necessary, it sends a first congestion control message to the nodes through which the virtual circuit passes. If the message indicates a larger window, the node receiving the message determines what size window it can provide and sends the message with that window size on to the next node. An output router at the other edge of the digital network receives the message, sets the window size based on the message as altered by the nodes, and returns a second message with the final window size via the nodes. On receipt of the second message, the nodes alter their windows and the input router sends cells as permitted by the new window. Included in the method are novel techniques for determining the ideal window size for a virtual circuit, for determining at the input router when a change in window size is necessary, and for determining the size of the window in the nodes.

ABSTRACT WORD COUNT: 206

**LEGAL STATUS (Type, Pub Date, Kind, Text):**

Application: 951213 A2 Published application (A1with Search Report  
;A2without Search Report)

Examination: 951213 A2 Date of filing of request for examination:  
950818

LANGUAGE (Publication,Procedural,Application): English; English; English

**FULLTEXT AVAILABILITY:**

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB95	1526
SPEC A	(English)	EPAB95	13179
Total word count - document A			14705
Total word count - document B			0
Total word count - documents A + B			14705

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**...CLAIMS A2**

1. A method employed in a **node** of a virtual circuit network for sizing a window in the **node** for a given one of k virtual circuits using a given **link** from the **node** in response to a request for a different-sized window in the **node**, the method comprising the steps of:  
determining the maximum window to which each of the k virtual

circuits is entitled according to a function whereby...

...j is greater than the maximum window for a virtual circuit j+1,  $1 \leq j \leq k$ ;

determining the window for each virtual circuit in the **node** and the **rank** of each virtual circuit with regard to the current size of its window;

determining a potential **rank** which the given virtual circuit would have if its window were the requested size; and

changing the **rank** of the given virtual circuit in the direction required by the potential **rank** by exchanging its **rank** with that of the next **ranking** virtual circuit in the required direction until the given virtual circuit either attains the potential **rank** or until further changing the **rank** of the given virtual circuit would require changing the **rank** of the next **ranking** virtual circuit to a **rank** such that the current size of the window of the next **ranked** virtual circuit is greater than the maximum window for the **rank** which the next **ranked** virtual circuit would receive as a result of the exchange; and

sizing the window for the given virtual circuit such that the window's size is the lesser of the size of the requested window and the size of the maximum window for the final **rank** attained by the given virtual circuit.

2. The method set forth in claim 1 wherein:

the step of determining the maximum window W( sub(i...

17/5,K/7

DIALOG(R)File 348:European Patents

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00664927

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**Information retrieval method**

**Informationswiederauffindungsverfahren**

**Procede de recouvrement d'informations**

PATENT ASSIGNEE:

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INVENTOR:

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Hatakeyama, Atushi, 1-2, Hiyoshicho-4-chome, Kokubunji-shi, (JP)

LEGAL REPRESENTATIVE:

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PATENT (CC, No, Kind, Date): EP 638870 A1 950215 (Basic)

APPLICATION (CC, No, Date): EP 94114719 860325;

PRIORITY (CC, No, Date): JP 8560678 850327

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30

ABSTRACT EP 638870 A1

A system for storing a large amount of heterogeneous information in proper arrangement for facilitating utilization thereof by user, while allowing semantical retrieval to be realized even from vague fragmental information. The system can find application in document filing system for storing and managing documents, intelligent card management systems for storing and managing cards such as memorandum cards, or personal data base required for handling heterogeneous information. A method of expressing the facts constituting information in terms of "concepts" representing things and "relations" defined between the concepts internally of computer, and a method of inputting user's information to computer through dialogical procedure and retrieving desired information. Information stored internally of the computer architects internally a concept network. A part of the concept network is displayed in various forms such as hierarchical form based on subsumption relations between the concepts, hierarchical representation based on part-whole relation between the concept, a frame display of a single concept, and tabular

representation of a set of concepts belonging to a given class. A method of browsing internally of the network by referring to the contents of the display. The user can thus easily know what kind of information has been stored internally of the computer, whereby he or she can perform inputting of new information and retrieval of desired information in facilitated and simplified manner. The relations stored internally of the computer are classified into "generic relationship" and "instance relation" representing individual facts, whereby generic framework of facts can be stored. The framework can be applied to concrete concepts through inheritance mechanism. The generic framework is displayed upon interaction with the user for allowing new information to be inputted and desired information to be retrieved in a facilitated and simplified manner. Retrieval by using semantic retrieval formula created internally through dialogical procedure is realized through inferring processing.  
(see image in original document)

ABSTRACT WORD COUNT: 311

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 950215 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 950215 A1 Date of filing of request for examination:  
941013  
Examination: 980408 A1 Date of despatch of first examination report:  
980219  
Change: 990107 A1 International patent classification (change)  
Change: 990107 A1 Title of invention (German) (change)  
Change: 990107 A1 Title of invention (English) (change)  
Change: 990107 A1 Title of invention (French) (change)

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF2	611
SPEC A	(English)	EPABF2	11284
Total word count - document A			11895
Total word count - document B			0
Total word count - documents A + B			11895

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...SPECIFICATION the concepts. Fig. 2 is a schematic diagram illustrating conceptually these elements in terms of a kind of a semantic network. In the figure, each **node** represented by an ellipse represents a concept, wherein the word written within the ellipse is typical one representing that concept. This word is referred to as the name of the concept. **Links** interconnecting the ellipses (i.e. solid and broken lines with respective arrows) represent the relationships among the concepts. For example, the fact that a "supercomputer 1012" is "one variety of" a "computer 1011" is represented by a **link** labelled "IS-A". Hereat, it should be mentioned that "UNIVERSAL 1010" is a specific concept defined to subsume all the other concepts. In other words, all the concepts constitute a concept tree having a root constituted by the concept "UNIVERSAL", wherein the concept tree represents a taxonomic hierarchy. The **link** "IS-A" is one variety of the relationships. However, this **link** also serves as a route for inheriting the property of a concept to the one **ranked** lower. Consequently, this **link** or relationship is considered discriminatively from the other relationships. To this end, the **links** "IS-A" are represented by the arrowed solid lines, while other **links** or relationships are represented by broken lines.

By way of example, suppose a generic property that computer runs software". It will be noted that this...

17/5,K/8

DIALOG(R) File 348:European Patents

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00637232

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Asynchronous switching node distributing dynamically cells to outputs forming an irregular group.

Asynchrone Vermittlungsstelle zur dynamischen Verteilung der Zellen an eine nicht-reguläre Gruppe der Ausgänge.

Noeud de commutation asynchrone distribuant dynamiquement des cellules vers des sorties constituant un groupe dit irrégulier.

PATENT ASSIGNEE:

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INVENTOR:

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LEGAL REPRESENTATIVE:

Sciaux, Edmond et al (58914), c/o SOSPI, 14-16 rue de la Baume, F-75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 618705 A1 941005 (Basic)

APPLICATION (CC, No, Date): EP 94400660 940328;

PRIORITY (CC, No, Date): FR 933763 930331

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: H04L-012/56; H04L-012/18;

ABSTRACT EP 618705 A1 (Translated)

The addresses of an irregular group of outputs of the **node** (ND) cannot be **linked** by a mathematical relationship. In order as regularly as possible to distribute cells applied to the input of the **node**, the latter includes translation circuits (T1, ... TN) determining, at the input of the network, an internal routing label identifying a regular subgroup of outputs, possibly consisting of a single output, according to an algorithm which is a function of the **rank** (j) of the input (Ij) receiving the said cell, and of the instant at which this cell was received. This algorithm thus achieves a spatial decorrelation and a time-based decorrelation of the cells.

Application to ATM telecommunications networks.

TRANSLATED ABSTRACT WORD COUNT: 118

ABSTRACT EP 618705 A1

Les adresses d'un groupe irrégulier de sorties du noeud (ND) ne peuvent pas être reliées par une relation mathématique. Pour distribuer aussi régulièrement que possible des cellules appliquées aux entrées du noeud, ce dernier comporte des circuits de traduction (T1, ..., TN) déterminant à l'entrée du réseau une étiquette d'acheminement interne identifiant un sous-groupe régulier de sorties, éventuellement constitué d'une seule sortie, selon un algorithme qui est fonction du rang (j) de l'entrée (Ij) recevant ladite cellule, et de l'instant auquel cette cellule a été reçue. Cet algorithme réalise ainsi une décorrélation spatiale et une décorrélation temporelle des cellules.

Application aux réseaux de télécommunication ATM. (voir l'image dans le document original)

ABSTRACT WORD COUNT: 114

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 941005 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 950322 A1 Date of filing of request for examination:  
950126

Examination: 980729 A1 Date of despatch of first examination report:  
980612

LANGUAGE (Publication,Procedural,Application): French; French; French

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(French)	EPABF2	656
SPEC A	(French)	EPABF2	6782
Total word count - document A			7438
Total word count - document B			0
Total word count - documents A + B			7438

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...ABSTRACT Translated)

The addresses of an irregular group of outputs of the **node** (ND) cannot be **linked** by a mathematical relationship. In order as regularly as possible to distribute cells applied to the input of the **node**, the latter includes translation circuits (T1, ... TN) determining, at the input of the network, an internal routing label identifying a regular subgroup of outputs, possibly consisting of a single output, according to an algorithm which is a function of the **rank** (j) of the input (Ij) receiving the said cell, and of the instant at which this cell was received. This algorithm thus achieves a spatial...

17/5,K/9

DIALOG(R)File 348:European Patents

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00604893

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**Optical transmission network with switching matrix**

**Optisches Übertragungsnetzwerk mit Schaltmatrix**

**Reseau de transmission optique avec matrice de commutation**

PATENT ASSIGNEE:

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Le Roy, Guy, Kervegan-Servel, F-22300 Lannion, (FR)

LEGAL REPRESENTATIVE:

Sciaux, Edmond et al (58918), COMPAGNIE FINANCIERE ALCATEL Departement

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PATENT (CC, No, Kind, Date): EP 592330 A1 940413 (Basic)

EP 592330 B1 990526

APPLICATION (CC, No, Date): EP 93402512 931011;

PRIORITY (CC, No, Date): FR 9212018 921009

DESIGNATED STATES: AT; BE; CH; DE; ES; FR; GB; IT; LI; NL; SE

INTERNATIONAL PATENT CLASS: H04Q-011/00;

CITED PATENTS (EP A): WO 9210770 A; EP 492852 A

CITED REFERENCES (EP A):

PROCEEDINGS, IEEE CONFERENCE ON COMPUTER COMMUNICATIONS (INFOCOM '88),

27-28 MARS 1988, PAGES 354-361, NEW ORLEANS US , XP44787 G.R.HILL 'A

Wavelength Routing Approach to Optical Communications Networks'

IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATION vol. 8, no. 6 , Ao)t 1990

, NEW YORK US pages 948 - 964 XP208590 C.A. BRACKETT 'Dense Wavelength

Division Multiplexing Networks: Principles and Applications'

PROCEEDINGS, INTERNATIONAL SWITCHING SYMPOSIUM, 27 MAI-1 JUIN 1990,

VOL.III PAGES 21-26, STOCKHOLM SE , XP130869 A.M. HILL 'A Distributed

Wavelength Switching Architecture for the TPON Local Network'

ELECTRONICS LETTERS vol. 23, no. 16 , 30 Juillet 1987 , STEVENAGE GB

pages 824 - 826 H. KOBRINSKI ET AL 'Demonstration of High Capacity in

the Lambdanet Architecture: a Multiwavelength Optical Network'

BBC RESEARCH DEPARTMENT REPORT no. 3 , Mars 1988 , TADWORTH GB pages 1 -

31 R.P. MARSDEN ET AL 'Digital Television Routing Systems: a Survey of

Optical and Electrical Techniques'

ELECTRONICS LETTERS vol. 28, no. 13 , 18 Juin 1992 , STEVENAGE GB pages

1268 - 1270 XP301528 H. OBARA ET AL 'Star Coupler Based WDM Switch

Employing Tunable Device with Reduced Tunability Range'

IEEE TRANSACTIONS ON PARALLEL AND DISTRIBUTED SYSTEMS vol. 1, no. 2 , Mai

1990 , NEW YORK US pages 47 - 53 XP128311 M. FUJIWARA ET AL 'Line

Capacity Expansion Schemes in Photonic Switching';

ABSTRACT EP 592330 A1 (Translated)

This network includes composite switching matrices (M1, M2, M3) each fanning out between several nodes (N1, N2, N3) of this network. These nodes are linked by optical fibres (L3A3, L1A4) transmitting spectral multiplexers which are included in these matrices. These matrices include emitters at staggered wavelengths (E2A1, 1...E2A2, 4), star-wired couplers (C2A1, C2A2) of the controlled spatial switching matrices

(X2A1...X2A4) and wavelength-controlled filters (F2A1,1...F2A4,4).

The invention applies to telecommunications.

TRANSLATED ABSTRACT WORD COUNT: 72

ABSTRACT EP 592330 A1

Ce reseau comporte des matrices de commutation composites (M1, M2, M3) eclatees chacune entre plusieurs noeuds (N1, N2, N3) de ce reseau. Ces noeuds sont relies par des fibres optiques (L3A3, L1A4) transmettant des multiplex spectraux et incluses dans ces matrices. Ces matrices comportent des emetteurs a longueurs d'onde echelonnees (E2A1, 1...E2A2, 4), des coupleurs en etoile (C2A1, C2A2) des matrices de commutation spatiales commandees (X2A1...X2A4) et des filtres commandes en longueurs d'onde (F2A1,1...F2A4,4).

L'invention s'applique aux telecommunications. (voir l image dans le document original)

ABSTRACT WORD COUNT: 87

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 940413 A1 Published application (A1with Search Report  
;A2without Search Report)  
Examination: 940831 A1 Date of filing of request for examination:  
940705  
Examination: 970625 A1 Date of despatch of first examination report:  
970509  
Change: 990428 A1 Representative (change)  
\*Assignee: 990428 A1 Applicant (transfer of rights) (change):  
Alcatel (201878) 54, rue la Boetie 75382 Paris  
Cedex 08 (FR) (applicant designated states:  
AT;BE;CH;DE;ES;FR;GB;IT;LI;NL;SE)  
\*Assignee: 990428 A1 Previous applicant in case of transfer of  
rights (change): ALCATEL N.V. (829134)  
Strawinsky laan 341, (World Trade Center)  
NL-1077 XX Amsterdam (NL) (applicant  
designated states:  
AT;BE;CH;DE;ES;FR;GB;IT;LI;NL;SE)  
Change: 990512 A1 Representative (change)  
Grant: 990526 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): French; French; French

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9921	1541
CLAIMS B	(German)	9921	1353
CLAIMS B	(French)	9921	1416
SPEC B	(French)	9921	1906
Total word count - document A			0
Total word count - document B			6216
Total word count - documents A + B			6216

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...CLAIMS a set of filters (F2A1,1, ..., F2A4,4) constituted by a succession of groups of filters (GF2A1, ..., GF2A4), in which succession the groups have respective **ranks** (1, ..., 4), each of said groups of filters (GF2A1) being constituted by filters (F2A1,1, ..., F2A1,4) in succession and having respective **ranks** (1, ..., 4) in the group, each of the filters (F2A1,1) of the group being connected to an output having the same **rank** as the filter and belonging to one of said active distributors (X2A1) that has the same **rank** as the group, each of the filters having a controlled wavelength constituted by one of said carrier wavelengths, and feeding one of said outputs (Q2A1...

...one portion constituting a wavelength multiplexer (C2B3), and the other portion constituting a demultiplexer (C2C3), the two portions being connected together via one of said **link** fibers (L2A3) that is associated with the split distributor, the demultiplexer (C2C3) constituting a resident portion of said split matrix, which portion is included in said **node** (N2) associated with the matrix (M2), and



the multiplexer (C2B3) and said group of emitters (GE2A3) connected to the multiplexer constituting an exiled portion of the split matrix, the exiled portion being included in a host **node** (N1) associated with one of said composite matrices (M1), the host **node** being constituted by one of said **nodes** that is connected directly via said **link** fiber (L23A) to the **node** (N2) associated with said split matrix (M2), the emitters (E2A3,1, ..., E2A3,4) included in the exiled portion being electrically fed via inputs (P2A3,1) provided with detection and amplification means and optically fed via said filters included in said host **node** (N1), said multiplexer (C2B3) firstly including a succession of inputs (1C2A3, ..., 4C2A3) constituting said succession of inputs of the split distributor (C2A3). the multiplexer secondly including an output (C2B3L) constituting one of said **link** outputs of the associated **node** (N2), the demultiplexer (C2C3) including firstly an input (C2C3L) constituting one of said **link** inputs of the associated **node** . and secondly a succession of outputs (C2A3,1, ..., C2A3,4) constituting said succession of outputs of the split distributor, said output (C2B3L) of the multiplexer being connected to said input (C2C3L) of the demultiplexer via said **link** fiber (L2A3) associated with the split distributor, so that a plurality of said items of data are transmitted simultaneously between said associated **node** (N2) and said host **node** (N1) by means of wavelength multiplexing and via the fiber.

3. A network according to claim 2, characterized by the fact that said node (N2)...

17/5,K/10

DIALOG(R)File 348:European Patents

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**Image recognition system.**

**Bilderkennungssystem.**

**Systeme de reconnaissance d'image.**

PATENT ASSIGNEE:

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Pawlicki, John A., 31464 Saratoga, Warren, Michigan 48093, (US)

LEGAL REPRESENTATIVE:

Allam, Peter Clerk et al (27601), LLOYD WISE, TREGEAR & CO. Norman House  
105-109 Strand, London WC2R 0AE, (GB)

PATENT (CC, No, Kind, Date): EP 519737 A2 921223 (Basic)  
EP 519737 A3 940119

APPLICATION (CC, No, Date): EP 92305646 920619;

PRIORITY (CC, No, Date): US 717430 910619

DESIGNATED STATES: CH; DE; FR; GB; IT; LI

INTERNATIONAL PATENT CLASS: G06K-009/68;

CITED PATENTS (EP A): US 3268864 A

CITED REFERENCES (EP A):

PATENT ABSTRACTS OF JAPAN vol. 11, no. 22 (P-538)21 January 1987 &  
JP-A-61 195 478 (NEC) 29 August 1986

5TH INT. CONF. ON PATTERN RECOGNITION 1 December 1980 , FLA pages 988 -  
90 S.T BOW 'Structural approach applicable to the primitive description  
and extraction for complex chinese ideograph recognition'

PROC. OF COMPUTER VISION AND PATTERN RECOGNITION '83 19 June 1983 ,  
WASHINGTON, VA pages 303 - 9 T PAVLIDIS 'Effects of distortion on the  
recognition rate of a structural OCR system'

PATENT ABSTRACTS OF JAPAN vol. 5, no. 84 (P-64)2 June 1981 & JP-A-56 031  
183 (FUJITSU) 28 March 1981;

ABSTRACT EP 519737 A2

An image recognition system includes a method and apparatus in which

images are characterised and compared on the basis of internal structure, which is independent of image size and image orientation. A library of reference images is first generated and stored, then each input image, or test image, is compared to the images stored in the library until a match is found. The image is represented in memory as nodes, lines, and curves. A plurality of descriptors, called reference keys and reference series, are generated for both the reference images and the test image. The reference library is screened for likely matches by comparing the descriptors for the test image of the descriptors in the reference images in the library. Inclusionary and exclusionary test are performed. After screening, each of the candidate reference images is searched by comparing the pathway through the reference image and the pathway through the test image, and by the degree of correlation between the reference and test images. In addition, the link ratio, a measure of the portion of the test image actually matched to the reference image is computed. Searching criteria, like the screening criteria are based on internal image structure, so that the recognition process is independent of image size and image orientation. (see image in original document)

ABSTRACT WORD COUNT: 217

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 921223 A2 Published application (Alwith Search Report  
;A2without Search Report)

Search Report: 940119 A3 Separate publication of the European or  
International search report

Examination: 940907 A2 Date of filing of request for examination:  
940713

Withdrawal: 970625 A2 Date on which the European patent application  
was deemed to be withdrawn: 970103

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	3550
SPEC A	(English)	EPABF1	14430
Total word count - document A			17980
Total word count - document B			0
Total word count - documents A + B			17980

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...SPECIFICATION determined by "weighing" nodes by their intensity of links.

In order to weight a matrix, it is necessary to establish a "level of affinity" among **nodes** with identical or closely matching numbers of **nodes**. The level of affinity follows the rule that each **node** will have the strongest affinity for the **node** to which it is connected with the greatest number of **links**, with the strength of the affinity lessening as the difference in number of **links** widens. Affinity among **nodes** will establish their **ranked** order.

The level of affinity can be measured using the reference series. This is accomplished by calculating the reference series for each node. The concept...the series are considered equal.

The following table shows the sorted cumulative reference series for the character "E". (see image in original document)

By sorting **nodes** by their cumulative reference series, an order can be established which will always generate the same weighted matrix for the same internal relationships in the **link /node** image structure. Once the **nodes** have been sorted, one additional step, the process of "sliding" **nodes** is applied. Once the **node** list has been sorted by each **node**'s cumulative reference series, it is already arranged in descending order with the **node** of greatest reference series leading the list. The sliding process consists of sorting among **nodes** of equal **rank** by moving to a higher position in the **node** list those **nodes** which are **linked** to higher **ranked** **nodes**.

This process can best be described by example. For instance, the letter "E" has 5 **nodes** with the single central **node** (Node 2) with 3 **links** also having the greatest reference series. There are also 3 terminal **nodes**, each with only 1 **link**. At the end of the reference series sort,

the 3 single link nodes may fall into in any one of 6 orders (i.e. 3!). Through the sliding process, however, the node that is connected to the 3-link node will be moved to a position in the node list higher than the other 2. The actual sliding process works by starting with the highest ranked node, (in the case of "E", this is Node 2) then checking each node connected to it by a direct link. In this example, Node 2 is connected to Nodes 1, 3 and 5. Each of these nodes is checked by comparing it to the one in the next higher position in the ranked node list. As can be seen in the above table Node 1 would be compared with Node 2, Node 3 with Node 1 and Node 5 with Node 4. A comparison is then conducted. If the node in the next higher slot has a higher reference series, the process stops, since the nodes are not of equal reference series value. If the reference series are equal, the nodes are switched. In the example, Node 2 has a higher reference series than Node 1. Thus, they would not be switched, however, Node 1 will be "flagged" to note that it has already been evaluated and should not be switched in another comparison. Node 3 is then compared with Node 1. Although they have the equal reference series, Node 1 has already been flagged and, thus, they will not be switched. The final comparison is between Node 5 and Node 4. Both Nodes have equal reference series and Node 5 has not been flagged as previously evaluated. They can be switched. This process is repeated until a node with a higher reference series is encountered. In the case of Node 4, this occurs when it is compared to Node 3. The process is completed for all nodes connected to the first node, Node 2. All nodes evaluated have been "marked" so that they cannot be switched with any others. The process is repeated starting with the second ranked node in the list Node 2 and proceeds along the list until all nodes have been considered. Once the sliding process has been completed for all nodes in an image, the matrix of linkages has been successfully "weighted" and will always be the same for images with the same link / node structure.

In summary, using character "E" as an example, the sliding process will move Node 5 to the highest position for all 1 link nodes since it is connected to Node 2, the highest ranking Node in the image structure. Node 6 will follow Node 5, since Node 6 is connected to Node 1, the second highest ranking Node in the image structure.

Once the matrix is created it is possible to generate the reference key. Identical matrices will always produce identical keys. Examples...

17/5,K/11

DIALOG(R) File 348:European Patents

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00502896

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ROUTING OF NETWORK TRAFFIC USING DISCRETE TRAFFIC MEASUREMENT DATA

NETZWERKVERKEHRSLEITWEGSTEUERUNG UNTER VERWENDUNG VON DISKRETEN VERKEHRSMESSDATEN

ACHEMINEMENT DE TRAFIC DE RESEAU UTILISANT DES DONNEES DE MESURES DE TRAFIC DISCRETES

PATENT ASSIGNEE:

BELL COMMUNICATIONS RESEARCH, INC., (745326), Legal Department, Morris Corporate Center, 445 South Street, Morristown, New Jersey 07960-6438, (US), (applicant designated states: FR;GB)

INVENTOR:

CHAUDHARY, Ved, Prakash, 22 Jackie Drive, Morganville, NJ 07751, (US)  
KRISHNAN, Komandur, Ramu, 56 Shannon Road, Bridgewater, NJ 08807, (US)

LEGAL REPRESENTATIVE:

Dubois-Chabert, Guy et al (15351), Societe de Protection des Inventions  
25, rue de Ponthieu, 75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 537153 A1 930421 (Basic)

EP 537153 A1 930804

EP 537153 B1 990414

WO 9120148 911226

APPLICATION (CC, No, Date): EP 91907016 910204; WO 91US728 910204

PRIORITY (CC, No, Date): US 538657 900615

DESIGNATED STATES: FR; GB

INTERNATIONAL PATENT CLASS: H04Q-003/66; H04M-003/36;

CITED PATENTS (WO A): US 4788721 A; US 4704724 A; US 4748658 A; US 4931941 A; US 4669113 A; US 4284852 A

CITED REFERENCES (EP A):

PROCEEDINGS OF NETWORK MANAGEMENT AND CONTROL WORKSHOP September 1989, TARRYTOWN (US) pages 389 - 413 S. KHERADPIR 'PARS: A predictive access-control and routing strategy for real-time control of telecommunication networks';

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 930421 A1 Published application (A1with Search Report ;A2without Search Report)  
Examination: 930421 A1 Date of filing of request for examination: 921211  
Change: 930623 A1 International patent classification (change)  
Change: 930623 A1 Obligatory supplementary classification (change)  
Search Report: 930804 A1 Drawing up of a supplementary European search report: 930615  
Examination: 960612 A1 Date of despatch of first examination report: 960425  
Change: 980701 A1 Title of invention (German) (change)  
\*Assignee: 981202 A1 Applicant (transfer of rights) (change): BELL COMMUNICATIONS RESEARCH, INC. (745326) Legal Department, Morris Corporate Center, 445 South Street Morristown, New Jersey 07960-6438 (US) (applicant designated states: FR;GB)  
\*Assignee: 981202 A1 Previous applicant in case of transfer of rights (change): BELL COMMUNICATIONS RESEARCH, INC. (745320) 290 West Mt. Pleasant Avenue Livingston, New Jersey 07039-2729 (US) (applicant designated states: FR;GB)  
Grant: 990414 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9915	551
CLAIMS B	(German)	9915	510
CLAIMS B	(French)	9915	581
SPEC B	(English)	9915	6745
Total word count - document A			0
Total word count - document B			8387
Total word count - documents A + B			8387

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...SPECIFICATION comprises TG4 and TG5; and R4 comprises TG4, TG6 and TG3.

In this progressive routing example, the first route considered, as required by the hierarchical **ranking**, is R1. If TG1 has a non-blocking status, the call is established over TG1. However, if TG1 is blocked, then R2 is considered next. If TG2 is free, routing control is passed from TC1 to PC2, without regard to the blocking status of TG3, the next **link** in R2. If TG3 is blocked, the calling party is given a network congestion signal indicative of a blocked route. With progressive routing, R3 or...

...on a local, step-by-step basis. Consideration on a local basis has, in part, been dictated by communication and signaling limitations imposed on the **nodes**.

With the present availability of stored program control (SPC) and so-called Common Channel Signaling (CCS) systems, communication among the various centers may now be...

17/5,K/12

DIALOG(R) File 348:European Patents

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00457921

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

Method for reducing the search complexity in analysis-by-synthesis coding

Methode zur Verminderung der Schwierigkeit der Suchen in  
Analyse-durch-Synthese-Kodierung

Methode pour reduire la difficulte de la recherche en codage utilisant  
l'analyse par synthese

PATENT ASSIGNEE:

GTE LABORATORIES INCORPORATED, (274323), 1209 Orange Street, Wilmington  
Delaware 01901, (US), (applicant designated states: BE;DE;FR;GB;IT)

INVENTOR:

Mazor, Baruch, 51-C JacksonStreet, Newton Centre, MA 02159, (US)

Veeneman, Dale E., 269 Cordaville Road, Southborough, MA 01772, (US)

LEGAL REPRESENTATIVE:

Grunecker, Kinkeldey, Stockmair & Schwanhausser Anwaltssozietat (100721)  
, Maximilianstrasse 58, 80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 446817 A2 910918 (Basic)  
EP 446817 A3 920304  
EP 446817 B1 970604

APPLICATION (CC, No, Date): EP 91103623 910308;

PRIORITY (CC, No, Date): US 494071 900315

DESIGNATED STATES: BE; DE; FR; GB; IT

INTERNATIONAL PATENT CLASS: G10L-009/14;

CITED REFERENCES (EP A):

ICASSP 90, 1990 INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL  
PROCESSING, Albuquerque, New Mexico, 3rd - 6th April 1990, vol. 1,  
pages 481-484, IEEE, New York, US; D.E. VEENEMAN et al.: "An efficient  
code structure and search strategy for stochastic coding at 8 kb/s"

ICASSP 82, IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH AND SIGNAL  
PROCESSING, Paris, 3rd - 4th May 1982, vol. 3, pages 1688-1671, IEEE,  
New York, US; M.R. SCHROEDER et al.: "Speech coding using efficient  
block codes"

IEEE TRANSACTIONS ON COMMUNICATIONS, vol. COM-27, no. 1, January 1979,  
pages 165-170, New York, US; S.G. WILSON et al.: "Adaptive tree  
encoding of speech at 8000 bits/s with a frequency-weighted error  
criterion"

IEEE TRANSACTIONS ON INFORMATION THEORY, vol. IT-17, no. 1, January 1971,  
pages 118-119, New York, US; F. JELINEK et al.: "Instrumentable tree  
encoding of information sources";

ABSTRACT EP 446817 A2

A method of encoding speech includes a limited search of a tree-code  
excitation codebook with a closed loop gain calculation for each test  
path under consideration. The gain calculation occurs when minimizing an  
error distance measurement between a synthetic signal defined by each  
test path being considered and the appropriate speech signal by  
optimizing a scaling factor of the synthetic signal. The encoding method  
achieves a significant reduction in computational complexity with minimal  
loss of performance. (see image in original document)

ABSTRACT WORD COUNT: 83

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 910918 A2 Published application (Alwith Search Report  
;A2without Search Report)

Search Report: 920304 A3 Separate publication of the European or  
International search report

Examination: 921028 A2 Date of filing of request for examination:  
920831

Examination: 950906 A2 Date of despatch of first examination report:  
950721

Grant: 970604 B1 Granted patent

Oppn None: 980527 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPABF1	991
CLAIMS B	(English)	EPAB97	334
CLAIMS B	(German)	EPAB97	325

CLAIMS B	(French)	EPAB97	413
SPEC A	(English)	EPABF1	3209
SPEC B	(English)	EPAB97	3222
Total word count - document A			4200
Total word count - document B			4294
Total word count - documents A + B			8494

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

...SPECIFICATION  $y(\text{sub } 2)y(\text{sub } 3)$  is less than that for the lower branch.

In stage 2, two branches are extended out of each of **nodes** 21 and 22 so that four test paths are now being considered. Each test path consists of one of the two saved branches from stage 1 **linked** with a respective one of the four extended branches. An error distance measurement is calculated for each of the test paths, and the results are indicated by an appropriate distance **ranking**  $d(\text{sub}(i=1 \text{ to } 4))$  on each branch. Again, the distance measurements are minimized by optimizing a scaling factor of each synthetic signal so...

...SPECIFICATION with codeletter sequence  $y1)y2)y3)$  is less than that for the lower branch.

In stage 2, two branches are extended out of each of **nodes** 21 and 22 so that four test paths are now being considered. Each test path consists of one of the two saved branches from stage 1 **linked** with a respective one of the four extended branches. An error distance measurement is calculated for each of the test paths, and the results are indicated by an appropriate distance **ranking**  $di=1 \text{ to } 4)$  on each branch. Again, the distance measurements are minimized by optimizing a scaling factor of each synthetic signal so that each...

17/5,K/13

DIALOG(R)File 348:European Patents

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00381534

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

**ROUTING OF NETWORK TRAFFIC.**

**NETZWERKVERKEHRSLEITWEGSTEUERUNG.**

**ACHEMINEMENT DES COMMUNICATIONS DANS UN RESEAU.**

PATENT ASSIGNEE:

BELL COMMUNICATIONS RESEARCH, INC., (745320), 290 West Mt. Pleasant Avenue, Livingston, New Jersey 07039-2729, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

KRISHNAN, Komandur, Ramu, 56 Shannon Road, Bridgewater, NJ 08807, (US)  
OTT, Teunis, Jan, 44 Mountain View Drive, Chester, NJ 07930, (US)

LEGAL REPRESENTATIVE:

Dubois-Chabert, Guy et al (15351), Societe de Protection des Inventions  
25, rue de Ponthieu, F-75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 393126 A1 901024 (Basic)

EP 393126 B1 930421

WO 8905552 890615

APPLICATION (CC, No, Date): EP 89900763 881206; WO 88US4353 881206

PRIORITY (CC, No, Date): US 130423 871209

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: H04M-007/00; H04Q-003/66; H04M-003/36;

CITED REFERENCES (EP A):

See also references of WO8905552;

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 901024 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 901024 A1 Date of filing of request for examination:  
900522

Examination: 920930 A1 Date of despatch of first examination report:  
920819

Grant: 930421 B1 Granted patent

Oppn None: 940413 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	613
CLAIMS B	(German)	EPBBF1	605
CLAIMS B	(French)	EPBBF1	704
SPEC B	(English)	EPBBF1	6049

Total word count - document A 0

Total word count - document B 7971

Total word count - documents A + B 7971

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

...SPECIFICATION comprises TG4 and TG5; and R4 comprises TG4, TG6 and TG3.

In this progressive routing example, the first route considered, as required by the hierarchical **ranking**, is R1. If TG1 has a non-blocking status, the call is established over TG1. However, if TG1 is blocked, then R2 is considered next. If TG2 is free, routing control is passed from TC1 to PC2, without regard to the blocking status of TG3, the next **link** in R2. If TG3 is blocked, the calling party is given a network congestion signal indicative of a blocked route. With progressive routing, R3 or...

...on a local, step-by-step basis. Consideration on a local basis has, in part, been dictated by communication and signaling limitations imposed on the **nodes**.

With the present availability of stored program control (SPC) and so-called Common Channel Signaling (CCS) systems, communication among the various centers may now be...

17/5,K/14

DIALOG(R)File 348:European Patents

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00336314

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**Apparatus and method for structuring data written according to ISO/8824/ASN.1 specification**

**Vorrichtung und Verfahren zur Strukturierung von nach ISO/8824/ASN.1-Spezifikation geschriebenen Daten**

**Dispositif et methode pour structurer des donnees ecrites selon la specification ISO/8824/ASN.1**

PATENT ASSIGNEE:

NEC CORPORATION, (236696), 33-1, Shiba 5-chome, Minato-ku Tokyo, (JP),  
(applicant designated states: DE;FR;GB)

INVENTOR:

Anezaki, Akihiro, c/o NEC Corporation 33-1, Shiba 5-chome, Minato-ku  
Tokyo, (JP)

LEGAL REPRESENTATIVE:

VOSSIUS & PARTNER (100311), Postfach 86 07 67, 81634 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 327102 A2 890809 (Basic)

EP 327102 A3 920122

EP 327102 B1 990506

APPLICATION (CC, No, Date): EP 89101890 890203;

PRIORITY (CC, No, Date): JP 8826465 880205

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-009/44; H04L-029/06;

CITED REFERENCES (EP A):

COMPUTER NETWORKS AND ISDN SYSTEMS. vol. 14, no. 2-5, 1987,  
AMSTERDAM, NL pages 297 - 303; F. CANESCHI ET AL.: 'AN ARCHITECTURE FOR  
AN ASN.1 ENCODER/DECODER'

SOFTWARE PRACTICE & EXPERIENCE. vol. 17, no. 11, November  
1987, CHICHESTER, GB pages 847 - 858; P. JALOTE: 'SYNTHESIZING  
IMPLEMENTATIONS OF ABSTRACT DATA TYPES FROM AXIOMATIC SPECIFICATIONS'

BRITISH TELECOM TECHNOL. JOURNAL vol. 5, no. 4, October  
1987, pages 70 - 75; J.A. ZAJACZKOWSKI: 'AN INTRODUCTION TO THE  
CCITT/ISO STANDARD ON TRANSFER SYNTAX AND NOTATION';

ABSTRACT EP 327102 A2

In a data structuring apparatus, input character strings written in accordance with the specification of ISO/8824/ASN.1 are decomposed and keywords representative of types and attributes are detected from the decomposed character strings. Type nodes are created from the detected type representative keywords and attribute nodes are created from the attribute representative keywords. Internode linking means is provided for establishing links between the type nodes and the attribute nodes according to hierarchical relationships between them and forming a tree structure by the established links. The tree structure is traced and the input character strings are translated according to the traced tree structure into a declaration sentence which can be processed by a computer program. (see image in original document)

ABSTRACT WORD COUNT: 122

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 890809 A2 Published application (Alwith Search Report ;A2without Search Report)  
 Examination: 890809 A2 Date of filing of request for examination: 890203  
 Search Report: 920122 A3 Separate publication of the European or International search report  
 Examination: 940406 A2 Date of despatch of first examination report: 940223  
 \*Assignee: 990107 A2 Applicant (transfer of rights) (change): NEC CORPORATION (236696) 33-1, Shiba 5-chome Minato-ku Tokyo (JP) (applicant designated states: DE;FR;GB)  
 \*Assignee: 990107 A2 Previous applicant in case of transfer of rights (change): NEC CORPORATION (236690) 7-1, Shiba 5-chome Minato-ku Tokyo (JP) (applicant designated states: DE;FR;GB)  
 Grant: 990506 B1 Granted patent

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	9918	470
CLAIMS B	(German)	9918	433
CLAIMS B	(French)	9918	547
SPEC B	(English)	9918	1900
Total word count - document A			0
Total word count - document B			3350
Total word count - documents A + B			3350

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...SPECIFICATION generating means 3 and 4 to generate nodes in cooperation with the internode linking means 5 in a manner described hereinbelow.

In Fig. 3, the **node** generating subroutine 13 of Fig. 2 begins with a decision block 15 which determines if each of the detected "type" keywords (elements) has a subelement. If the answer is affirmative, exit is to subroutine 16 which directs the attribute **node** generating means 4 to successively generate "attribute" **nodes** beginning with a subelement having a lowermost **rank**. Thus, in respect of "INTEGER", attribute **nodes** eal1 and eal3 are successively created and in respect of "IA5String" and "SEQUENCE" attribute **nodes** eal2 and eal4 are created, respectively (see Fig. 7). As shown in detail in Fig. 4, the subroutine 16 of Fig 3 begins with a decision block 41 which determines if there is a lower **ranking** subelement in the elements detected by operations block 13. If there is one, exit is to operations block 42 which causes the internode linking means 5 to establish links between such subelements and directs the writing of pointers linking the above-mentioned "attribute" **nodes** into the first item of such attribute **nodes** having a lower **ranking** subelement. If there is no lower **ranking** subelement in the detected subelements, exit is to operations block 43 which directs the writing of a null pointer (-) into the first item of an attribute **node** having no lower **ranking** subelement. As shown in Fig. 7, if attribute **nodes** eal1, eal2, eal3 and eal4 are **ranked** in an increasing



order named, a pointer to attribute **node** eal1 is written into the first item of **node** eal2, a pointer to **node** eal2 is written into the first item of **node** eal3, and a null pointer (-) is written into the first item of attribute **nodes** eal1 and eal4.

The attribute node generating means 4 proceeds to operations block 44 which directs the writing of a value corresponding to the identifier...eal4.

If the answer is negative in decision block 15 or subroutine 16 has been executed, control proceeds to subroutine 17 which directs the type **node** generating means 3 to write a value indicative of the type of each **node** into the first item of that **node** and directs the internode **linking** means 5 to detect a pointer **linking** each type **node** to a higher **ranking** attribute **node** if there is one and writes the pointer into the second item of type **nodes**. If there is no subelement, a null pointer is written into the second item of type **nodes**. As shown in Fig. 7, for example, "INTEGER", "IA5String", and "SEQUENCE" are written into the first item of the type **nodes** ttl1, ttl2 and ttl4, respectively, and a null pointer is written into the second item of type **nodes** ttl1 and ttl2 and a pointer to attribute **node** eal3 is written into the second item of type **node** ttl4.

In this way, attribute node and type nodes are linked in tree form. In operations block 14, the C-language declaration sentence generating means ...

17/5,K/15

DIALOG(R)File 348:European Patents

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00273869

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**Synthetic peptides which induce cellular immunity to the aids virus and aids viral proteins.**

**Synthetische Peptide, die zellulare Immunitat gegen den AIDS-Virus und dessen Proteine erzeugen.**

**Peptides synthetiques induisant l'immunité cellulaire contre le virus du SIDA et ses proteines.**

PATENT ASSIGNEE:

THE UNITED STATES OF AMERICA as represented by the Secretary, United States Department of Commerce, (301900), National Technical Information Service, Office of Government Inventions and Patents, 5285 Port Royal Road, Springfield, Virginia 22161, (US), (applicant designated states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)

INVENTOR:

Berzofsky, Jay A., 9321 Corsica Drive, Bethesda, MD 20814, (US)  
Cease, Kemp B., 2006 Baltimore Road, Apt. D43, Rockville, MD 20851, (US)  
DeLisi, Charles, 7805 Radnor Road, Bethesda, MD 20814, (US)  
Margalit, Hanah, 252 Congressional Lane, Apt. 102, Rockville, MD 20852, (US)  
Cornette, James L., 2814 Torrey Pines Circle, Ames, IA 50010, (US)  
Ouyang, Cecilia Spencer, 1915 Winnexburg Court, Apt. 101, Silver Spring, MD 20906, (US)

LEGAL REPRESENTATIVE:

Jump, Timothy John Simon et al (55591), F.J. Cleveland and Company 40-43 Chancery Lane, London WC2A 1JQ, (GB)

PATENT (CC, No, Kind, Date): EP 273716 A2 880706 (Basic)  
EP 273716 A3 891220  
EP 273716 B1 930811

APPLICATION (CC, No, Date): EP 87311391 871223;

PRIORITY (CC, No, Date): US 947935 861230; US 14430 870212

DESIGNATED STATES: AT; BE; CH; DE; FR; GB; IT; LI; LU; NL; SE

INTERNATIONAL PATENT CLASS: C07K-007/08; C07K-007/10; A61K-037/02; A61K-039/21

ABSTRACT EP 273716 A2

This invention relates to the identification of short peptide segments of AIDS virus proteins which elicit T cellular immunity, and to a method of inducing cellular immunity to native proteins of the AIDS virus by

immunization with short synthetic peptides. Five potential peptides have been identified by searching for regions which can fold as a maximally amphipathic helix. These may be useful to include in either a synthetic peptide- or recombinant fragment-based vaccine.

ABSTRACT WORD COUNT: 77

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 880706 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Examination: 880706 A2 Date of filing of request for examination:  
871230  
Search Report: 891220 A3 Separate publication of the European or  
International search report  
\*Assignee: 910109 A2 Applicant (transfer of rights) (change): THE  
UNITED STATES OF AMERICA as represented by the  
Secretary, United States Department of Commerce  
(301900) National Technical Information  
Service, Office of Government Inventions and  
Patents, 5285 Port Royal Road Springfield,  
Virginia 22161 (US) (applicant designated  
states: AT;BE;CH;DE;FR;GB;IT;LI;LU;NL;SE)  
Examination: 920122 A2 Date of despatch of first examination report:  
911205  
Grant: 930811 B1 Granted patent  
Oppn None: 940803 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	371
CLAIMS B	(German)	EPBBF1	297
CLAIMS B	(French)	EPBBF1	378
SPEC B	(English)	EPBBF1	5089
Total word count - document A			0
Total word count - document B			6135
Total word count - documents A + B			6135

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...SPECIFICATION gp120 envelope protein of the HTLV-IIIb isolates of HIV for sequences consistent with formation of amphipathic helices as potential T cell sites. Sites were **ranked** according to the apparent strength of helical amphipathicity as reflected in the Amphipathic Score, and frequencies were examined for consistency. Sites were further selected for occurrence in constant regions of gp120 (based on a comparison of the sequence of six isolates) and for absence of N-linked glycosylation sites. AMPHI parameters for the two most favorable sites are shown in Figure 2. Candidate T cell sites were selected by including appropriate flanking...R10 contains residues 49 through 474 and PB1 residues 294 through 474 of the envelope protein.

As a genetically defined model of an outbred population, **there** was studied the immune response to these proteins in (C57BL/6 x C3H/HeJ)F(sub 1) and (A.SW x BALB/c)F(sub...

17/5,K/16

DIALOG(R)File 348:European Patents

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00253441

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ROUTING OF NETWORK TRAFFIC.

NETZWERKVERKEHRSLEITWEGSTEUERUNG.

ACHEMINEMENT DU TRAFIC DANS UN RESEAU.

PATENT ASSIGNEE:

Bell Communications Research, Inc., (745320), 290 West Mt. Pleasant  
Avenue, Livingston New Jersey 07039-2729, (US), (applicant designated  
states: CH;DE;FR;GB;LI)

INVENTOR:

KRISHNAN, Komandur, Ramu, 56 Shannon Road, Bridgewater, NJ 08807, (US)  
OTT, Teunis, Jan, 44 Mountain View Drive, Chester, NJ 07930, (US)

LEGAL REPRESENTATIVE:

Dubois-Chabert, Guy et al (15351), Societe de Protection des Inventions  
25, rue de Ponthieu, F-75008 Paris, (FR)

PATENT (CC, No, Kind, Date): EP 288462 A1 881102 (Basic)

EP 288462 B1 910529

WO 8703763 870618

APPLICATION (CC, No, Date): EP 86906601 861014; WO 86US2154 861014

PRIORITY (CC, No, Date): US 805302 851205

DESIGNATED STATES: CH; DE; FR; GB; LI

INTERNATIONAL PATENT CLASS: H04M-007/00; H04Q-003/66; H04M-003/36;

CITED REFERENCES (EP A):

See also references of WO8703763;

CITED REFERENCES (WO A):

International Teletraffic Congress, ITC-11, Volume 5, September 1985,  
Elsevier Science Publishers B.V. (North-Holland), (Amsterdam, NL), T.J.

OTT et al.: "State Dependent Routing of Telephone Traffic and the use  
of Separable Routing Schemes", pages 867-872, see page 870, paragraph 5

Tenth International Teletraffic Congress, Proceeding 1, Volume 1, June  
1983, (Montreal, CA), T. KARSTAD et al.: "Centralized Routing based on  
Forecasts of the Telephone Traffic", session 3.2, paper No. 7, pages  
1-6, see page 1, left-hand column, line 14 - right-hand column, line  
17; page 2, right-hand column; page 3, left-hand column, paragraph 4

International Teletraffic Congress, ITC-11, Volume 5, September 1985,  
Elsevier Science Publishers B.V. (North-Holland), (Amsterdam, NL), G.R.  
ASH: "Use of a Trunk Status Map for Real-Time DNHR", pages 795-801, see  
page 797, left-hand column, lines 31-34; page 798, left-hand column,  
lines 1-46 cited in the application

The Bell System Technical Journal, Volume 60, No. 8, October 1981,  
American Telephone and Telegraph Company, (Murray Hill, US), G.R. ASH  
et al.: "Servicing and Real-Time Control of Networks with Dynamic  
Routing", pages 1821-1845, see pages 1839-1841, paragraphs 5.1 and 5.2;

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 881102 A1 Published application (A1with Search Report  
;A2without Search Report)

Examination: 881102 A1 Date of filing of request for examination:  
880526

Examination: 901003 A1 Date of despatch of first examination report:  
900820

Grant: 910529 B1 Granted patent

Oppn None: 920520 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPBBF1	489
CLAIMS B	(German)	EPBBF1	490
CLAIMS B	(French)	EPBBF1	546
SPEC B	(English)	EPBBF1	5411
Total word count - document A			0
Total word count - document B			6936
Total word count - documents A + B			6936

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...SPECIFICATION comprises TG4 and TG5; and R4 comprises TG4, TG6 and TG3.

In this progressive routing example, the first route considered, as  
required by the hierarchical **ranking**, is R1. If TG1 has a non-blocking  
status, the call is established over TG1. However, if TG1 is blocked,  
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from TC1 to PC2, without regard to the blocking status of TG3, the next  
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With the present availability of stored program control (SPC) and

so-called Common Channel Signaling (CCS) systems, communication among the various centers may now be effected...

17/5,K/17

DIALOG(R) File 348:European Patents

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00199823

ORDER fax of complete patent from Dialog SourceOne. See HELP ORDER 348

**System for information storage and retrieval.**

**Informationsaufzeichnungs- und Wiederauffindungssystem.**

**Systeme d'enregistrement et de recherche d'information.**

PATENT ASSIGNEE:

HITACHI, LTD., (204144), 6, Kanda Surugadai 4-chome, Chiyoda-ku, Tokyo  
100, (JP), (applicant designated states: DE;FR;GB)

INVENTOR:

Fujisawa, Hiromichi, Kotesashi-Haitsu 510 15 Kotesashicho-3-chome,  
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Higashino, Jun'ichi, 14-6, Nishikoigakubo-4-chome, Kokubunji-shi, (JP)

Hatakeyama, Atushi, 1-2, Hiyoshicho-4-chome, Kokubunji-shi, (JP)

LEGAL REPRESENTATIVE:

Strehl Schubel-Hopf Groening & Partner (100941), Maximilianstrasse 54,  
D-80538 Munchen, (DE)

PATENT (CC, No, Kind, Date): EP 196064 A2 861001 (Basic)

EP 196064 A3 891115

EP 196064 B1 951018

APPLICATION (CC, No, Date): EP 86104083 860325;

PRIORITY (CC, No, Date): JP 8560678 850327

DESIGNATED STATES: DE; FR; GB

INTERNATIONAL PATENT CLASS: G06F-017/30;

CITED PATENTS (EP A): EP 130050 A; EP 130050 A

CITED REFERENCES (EP A):

FIRST INTERNATIONAL WORKSHOP ON EXPERT DATABASE SYSTEMS, 24th-27th  
October 1984, pages 79-90, Kiawah Island, South Carolina, US; T. FININ  
et al.: "Interactive classification as a knowledge acquisition tool"

IDEM

PROCEEDINGS OF NATIONAL CONFERENCE OF AAAI, 1982, pages 314-318; F.N. TOU  
et al.: "RABBIT: An intelligent database assistant"

IEEE TRANSACTIONS ON SOFTWARE ENGINEERING, vol. SE-10, no. 6, November  
1984, pages 619-628, IEEE, New York, US; D.R. DOLK et al.: "Knowledge  
representation for model management systems";

ABSTRACT EP 196064 A2

System for information storage and retrieval.

A system for storing a large amount of heterogeneous information in proper arrangement for facilitating utilization thereof by user, while allowing semantical retrieval to be realized even from vague fragmental information. The system can find application in document filing system for storing and managing documents, intelligent card management systems for storing and managing cards such as memorandum cards, or personal data base required for handling heterogeneous information. A method of expressing the facts constituting information in terms of .<<.concepts.>>. representing things and .<<.relations.>>. defined between the concepts internally of computer, and a method of inputting user's information to computer through dialogical procedure and retrieving desired information, information stored internally of the computer architects internally a concept network. A part of the concept network is displayed in various forms such as hierarchical form based on subsumption relations between the concepts, hierarchical representation based on part-whole relation between the concept, a frame display of a single concept, and tabular representation of a set of concepts belonging to a given class. A method of browsing internally of the network by referring to the contents of the display. The user can thus easily know what kind of information has been stored internally of the computer, whereby he or she can perform inputting of new information and retrieval of desired information in facilitated and simplified manner. The relations stored internally of the computer are classified into

.<<.generic relationship.>>. and .<<.instance relation.>>. representing individual facts, whereby generic framework of facts can be stored. The framework can be applied to concrete concepts through inheritance mechanism. The generic framework is displayed upon interaction with the user for allowing new information to be inputted and desired information to be retrieved in a facilitated and simplified manner. Retrieval by using semantic retrieval formula created internally through dialogical procedure is realized through inferring processing.

ABSTRACT WORD COUNT: 311

LEGAL STATUS (Type, Pub Date, Kind, Text):

Application: 861001 A2 Published application (Alwith Search Report  
;A2without Search Report)  
Change: 890118 A2 Representative (change)  
Search Report: 891115 A3 Separate publication of the European or  
International search report  
Examination: 900530 A2 Date of filing of request for examination:  
900329  
Examination: 920805 A2 Date of despatch of first examination report:  
920623  
Change: 951018 A2 Miscellaneous (change)  
Grant: 951018 B1 Granted patent  
Oppn None: 961009 B1 No opposition filed

LANGUAGE (Publication,Procedural,Application): English; English; English

FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS B	(English)	EPAB95	292
CLAIMS B	(German)	EPAB95	265
CLAIMS B	(French)	EPAB95	373
SPEC B	(English)	EPAB95	11348
Total word count - document A			0
Total word count - document B			12278
Total word count - documents A + B			12278

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...SPECIFICATION the concepts. Fig. 2 is a schematic diagram illustrating conceptually these elements in terms of a kind of a semantic network. In the figure, each **node** represented by an ellipse represents a concept, wherein the word written within the ellipse is typical one representing that concept. This word is referred to as the name of the concept. **Links** interconnecting the ellipses (i.e. solid and broken lines with respective arrows) represent the relationships among the concepts. For example, the fact that a "supercomputer 1012" is "one variety of" a "computer 1011" is represented by a **link** labelled "IS-A". Hereat, it should be mentioned that "UNIVERSAL 1010" is a specific concept defined to subsume all the other concepts. In other words, all the concepts constitute a concept tree having a root constituted by the concept "UNIVERSAL", wherein the concept tree represents a taxonomic hierarchy. The **link** "IS-A" is one variety of the relationships. However, this **link** also serves as a route for inheriting the property of a concept to the one **ranked** lower. Consequently, this **link** or relationship is considered discriminatively from the other relationships. To this end, the **links** "IS-A" are represented by the arrowed solid lines, while other **links** or relationships are represented by broken lines.  
By way of example, suppose a generic property that "computer runs software". It will be noted that this...

File 256:SoftBase:Reviews,Companies&Prods. 85-1999/May  
(c)1999 Info.Sources Inc  
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File 278:Microcomputer Software Guide 1999/May  
(c) 1999 Reed Elsevier Inc.  
File 610:Business Wire 1999-1999/Jun 10  
(c) 1999 Business Wire.  
File 613:PR Newswire 1999-1999/Jun 10  
(c) 1999 PR Newswire Association Inc

Set	Items	Description
S1	54906	CATEGORI? OR RANK OR PRIORIT? OR HIERARCH? OR CLASSIF?
S2	148655	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	328208	LINK? OR CONNECT? OR JOIN OR COMBINE? OR BACK()LINK? OR BA- CKLINK?
S4	99190	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?)
S5	333897	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	272716	CITATION? OR DOCUMENT? OR REPORT? ?
S7	19	WEIGHTED(7N)SUM
S8	1	(S1(5N)S2)(S)(S3(5N)S4)(S)S5
S9	60	(S1(5N)S2)(S)S3(S)S5
S10	4	S1(5N)S2(5N)S3(5N)S5
S11	187	S1(3N)S2
S12	16	S11(5N)S3
S13	0	S12(5N)S5
S14	1	S12(S)S5
S15	1	RD (unique items)
S16	14	S6(S)S9

10/3,K/1 (Item 1 from file: 621)  
DIALOG(R)File 621:New Prod.Annou.(R)  
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00953256

50260667

**WRQ Reflection EnterView First to Quickly and Easily Deliver Web-Based Host Access Across the Enterprise.**

Business Wire  
August 24, 1998 WORD COUNT: 1000

...NT PC, Mac, laptop, workstation or network computer (a browser with full Java 1.1 support is required).

**Ease of Use**

Simple operation is a **priority** when deploying a new **terminal** emulation product. With Reflection EnterView, one click on a **web link connects** any user.

Reflection EnterView's flexible design takes advantage of the web environment through Java-based APIs (application program interfaces). Accessible through Java, JavaScript, VBScript...

10/3,K/2 (Item 2 from file: 621)  
DIALOG(R)File 621:New Prod.Annou.(R)  
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00942541

50215931

**ClientSoft Announces Investment by Spencer Trask.**

Business Wire  
DATELINE: TARRYTOWN, N.Y. August 3, 1998 WORD COUNT: 429

...most demanding clients  
in the Fortune 1000 to date."

ClientSoft has been providing companies and organizations with software solutions focusing on the Year 2000 Transition, **Web** enablement of legacy applications and **terminal** emulator replacement. Annually, these three industry **categories** are a **combined** \$1.5 billion market.

"Our customers have earned the right to expect the best -solutions that work internally and externally," stated Scott C. Nevins, President...

10/3,K/3 (Item 3 from file: 621)  
DIALOG(R)File 621:New Prod.Annou.(R)  
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00563412

00563412

**Cisco Systems Expands CiscoPro Line with Remote Access, Internet Gateway and Switching Solutions; Secures Over 700 VARs for Distribution to Mid-Tier Businesses; CiscoPro Products Now Available Worldwide.**

Business Wire  
DATELINE: SAN JOSE, Calif. Jan 9, 1996 WORD COUNT: 1267

...meet the needs of customers who want networking solutions that are easy to buy, install and manage. The 17 new CiscoPro products fall into three **categories** : **Internet** gateway, access and workgroup. The CiscoPro **Internet Junction** software gateway provides Novell NetWare users with secure, easy to administer **connectivity** to the Internet. CiscoPro access products offer a broad range of ISDN solutions and support a wide variety of

applications, including Internet access, corporate database...

10/3,K/4 (Item 4 from file: 621)  
DIALOG(R)File 621:New Prod.Annou.(R)  
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00344705

00344705

#### HUGHES LAN SYSTEMS ANNOUNCES LAT LICENSE AGREEMENT

News Release

DATELINE: MOUNTAIN VIEW, CA December 7, 1992 WORD COUNT: 320

...announced a license agreement with Digital Equipment Corporation for Digital's LAT protocol. The license will apply to Hughes' LlNC/Term and Enterprise Hub (TM) **terminal** servers and the ProLINC (TM) multiprotocol **connectivity** software package.

"We make it a **priority** to provide our customers with easy access to the different protocols used with a **LAN** environment," said Bobbi Murphy, vice president of marketing for Hughes LAN Systems. "The license agreement between Hughes and Digital will facilitate the use of the...



File 2:INSPEC 1969-1999/May W5  
     (c) 1999 Institution of Electrical Engineers  
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     (c) 1999 INIST/CNRS.  
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     (c) 1999 Cambridge Sci Abs  
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 File 103:Energy SciTec 1974-1999/May B2  
     (c) 1999 Contains copyrighted material  
 File 62:SPIN(R) 1975-1999/May W2  
     (c) 1999 American Institute of Physics  
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     (c) 1999 Cambridge Sci Abs  
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     (c) 1999 UMI  
 File 202:Information Science Abs. 1966-1999/Mar  
     (c) Information Today, Inc  
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     (c)1999 Japan Science and Tech Corp(JST)  
 File 370:Science 1996-1999/Apr W3  
     (c) 1999 AAAS  
 File 99:Wilson Appl. Sci & Tech Abs 1983-1999/Apr  
     (c) 1999 The HW Wilson Co.

Set	Items	Description
S1	5291610	CATEGORI? OR RANK OR PRIORIT? OR RATE OR HIERARCH? OR ORDER OR CLASSIF?
S2	1472108	NODE? ? OR PROCESSOR? ? OR CONTROLLER? ? OR TERMINAL? ? OR BRANCH?? ? OR JUNCTION?
S3	1584792	LINK? OR CONNECT? OR JOIN OR COMBINE
S4	755836	DATABASE? OR DATABANK? OR DATA() (BASE? OR BANK?) OR LIBRARY
S5	184777	INTERNET OR INTRANET OR LAN OR WORLD()WIDE()WEB OR WEB OR - LOCAL()AREA()NETWORK?
S6	3334649	CITATION? OR DOCUMENT? OR REPORT? ?
S7	167949	S2(S)S1
S8	126	S7 AND S3 AND S4 AND S5
S9	16	(S1(5N)S2) AND S3 AND S4 AND S5
S10	12	RD (unique items)

10/3,K/1 (Item 1 from file: 2)

DIALOG(R)File 2:INSPEC

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6246899 INSPEC Abstract Number: B1999-06-6210R-037, C1999-06-6130M-024

**Title: Dynamic storage in resource scarce browsing multimedia applications**

Author(s): Elenbaas, H.; Dimitrova, N.

Author Affiliation: Philips Res., Briarcliff Manor, NY, USA

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)

vol.3527 p.362-71

Publisher: SPIE-Int. Soc. Opt. Eng,

Publication Date: 1998 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

SICI: 0277-786X(1998)3527L:362:DSRS;1-V

Material Identity Number: C574-1998-293

U.S. Copyright Clearance Center Code: 0277-786X/98/\$10.00

Conference Title: Multimedia Storage and Archiving Systems III

Conference Sponsor: SPIE

Conference Date: 2-4 Nov. 1998 Conference Location: Boston, MA, USA

Language: English

Copyright 1999, IEE

...Abstract: and the limited memory for temporary caching. We propose an approach for latency optimization in information browsing applications. We proposed a method for flattening hierarchically **linked** documents in a manner convenient for network transport over slow channels to minimize browsing latency. Flattening of the hierarchy involves linearization, compression and bundling of the document **nodes**. After the transfer, the compressed **hierarchy** is stored on a local device where it can be partly unbundled to fit the caching limits at the local site while giving the user availability to the content. This optimal bundling method will work for general **Web** browsing, wireless browsing, as well as video **library** applications. We consider the video **library** browsing in more detail. The video is summarized in a Visual Table of Content (VTOC), which consists of sample multimedia content items such as video...

...Descriptors: **Internet** ;

...Identifiers: hierarchically **linked** documents...

...general **Web** browsing...

...video **library** applications...

10/3,K/2 (Item 2 from file: 2)

DIALOG(R)File 2:INSPEC

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5969198 INSPEC Abstract Number: C9808-6160Z-029

**Title: Some conditions for cost efficiency in hypermedia**

Author(s): Westland, J.C.

Author Affiliation: Hong Kong Univ., Hong Kong

Journal: Information Processing & Management vol.34, no.2-3 p. 309-23

Publisher: Elsevier,

Publication Date: March-May 1998 Country of Publication: UK

CODEN: IPMADK ISSN: 0306-4573

SICI: 0306-4573(199803/05)34:2/3L:309:SCCE;1-J

Material Identity Number: I276-98002

U.S. Copyright Clearance Center Code: 0306-4573/98/\$19.00+0.00

Language: English

Copyright 1998, IEE

...Abstract: in multimedia and hypertext have created new opportunities for providing information to business and consumers. Hypermedia has appeared as an important tool for accessing the **Internet**. Prior hypermedia research mainly has recommended design standards for the interface. The current research models the administrative and operating

costs surrounding a hypermedia **database** , and determines seven conditions for the cost justification of hypermedia. These are: (1) higher **linking** costs proportionately reduce the total number of **links** implemented; (2) increasing the benefits from using the **database** increases the total number of **links** proportionately; (3) increasing **database** size results in an increase in the total number of **links** implemented; (4) if the **database** user learns from the **database** slowly, then a larger number of **links** need to be provided; (5) the maximum size of **database** which is justified on cost will increase as the average cost of **linking** each node becomes smaller; (6) the total benefit from usage required in order to cost justify a **database** will decrease as the average cost of **linking** each node becomes smaller; and (7) the maximum size of **database** which is cost justified will increase rapidly as the learning rate increases-large **databases** are more easily justified if the users can be assured of picking up useful information when traversing the **nodes** . The learning **rate** can be increased by careful construction of **links** and **nodes** so that they are maximally informative.

...Identifiers: **Internet** access...

...hypermedia **database** ; **linking** costs...

...**database** size...

...**database** user...

...large **databases**

10/3,K/3 (Item 3 from file: 2)

DIALOG(R)File 2:INSPEC

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5744100 INSPEC Abstract Number: C9712-7480-076

**Title: Supervision and monitoring system of a blast furnace**

Author(s): Remorino, M.; Zecchi, M.

Author Affiliation: SIDERAR S.A.I.C., Buenos Aires, Argentina

Conference Title: Low Cost Automation 1995. (LCA'95). A Postprint volume from 4th IFAC Symposium p.29-36

Editor(s): Paiuk, J.; Weisz, J.P.

Publisher: Pergamon, Oxford, UK

Publication Date: 1996 Country of Publication: UK ix+422 pp.

ISBN: 0 08 042239 X Material Identity Number: XX95-02077

Conference Title: Proceedings of Symposium on Low Cost Automation

Conference Sponsor: IFAC

Conference Date: 13-15 Sept. 1995 Conference Location: Buenos Aires, Argentina

Language: English

Copyright 1997, IEE

...Abstract: running online and offline: stove optimization, mass and heat balance, burden calculation, process calculations and hearth level control; (iv) ancillary services networking-the system is **connected** to the main ancillary services (sinter plant, laboratories, coke plant) by means of dedicated networks which feed data to the **databases** for model control and data analysis and storage. The system is made up of a PC network interconnected to the PLC network (ModBusPlus). All the screen, **connection** and model programming is done in C language. Due to the fact that the system is built on a PC basis, it has high reliability as any PC station can be replaced with another one. This allows the expansion to future **nodes** in **order** to build a whole network for the reduction sector of the plant.

...Descriptors: **local area networks** ;

...Identifiers: **databases** ;

10/3,K/4 (Item 4 from file: 2)

DIALOG(R)File 2:INSPEC

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5512949 INSPEC Abstract Number: C9704-3355F-003

**Title: Information technology in robotics**

Author(s): Probst, R.; Kronreif, G.

Author Affiliation: Inst. for Handling Devices & Robotics, Tech. Univ. of Vienna, Austria

Conference Title: The First World Congress on Intelligent Manufacturing Processes and Systems. Proceedings Part vol.1 p.612-20 vol.1

Publisher: Univ. Puerto Rico, San Juan, Puerto Rico

Publication Date: 1995 Country of Publication: Puerto Rico 2 vol. (xii+xx+1399) pp.

Material Identity Number: XX95-00332

Conference Title: Proceedings of 1st World Congress on Intelligent Manufacturing Processes and Systems

Conference Sponsor: Int. Inst. Production Eng. Res.; IEEE

Conference Date: 13-17 Feb. 1995 Conference Location: Mayaguez/San Juan, Puerto Rico

Language: English

Copyright 1997, IEE

...Abstract: of the robot. Controlling the robot with his own controller. The peripheral devices are controlled by a programmable controller which is supervised by the robot **controller**. Controlling is done by a **hierarchical** control structure. In the second part of the paper a hierarchical control structure based on information demands of assembly cells is presented. These demands can be divided into: controlling tasks, supervising tasks, sequence tasks, error handling, statistics. To handle the whole information flow within the cell and to other **connected** system like PPS-Systems or CIM-solutions, we use a Client-Server architecture with a central **database** and interfaces to the subsystems. These interfaces can be basic I/O-lines as well as **local area networks (LAN 's)**. As a first example the last part of the paper describes an assembly cell for assembling flashlights using this control concept.

...Descriptors: **local area networks**

...Identifiers: **local area networks** ;

10/3,K/5 (Item 5 from file: 2)

DIALOG(R)File 2:INSPEC

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5091352 INSPEC Abstract Number: B9512-6140C-209, C9512-5260B-183

**Title: Distributed optimization of codebooks**

Author(s): Piscaglia, P.; Macq, B.; Maes, P.

Author Affiliation: Univ. Catholique de Louvain, Belgium

Journal: Signal Processing: Image Communication vol.7, no.3 p. 211-23

Publication Date: Sept. 1995 Country of Publication: Netherlands

CODEN: SPICEF ISSN: 0923-5965

U.S. Copyright Clearance Center Code: 0923-5965/95/\$9.50

Language: English

Copyright 1995, IEE

Abstract: Nowadays, many computer facilities are constituted by a network of general-purpose workstations. The paper shows how to **combine** the available resources of this network in order to deal efficiently with time-consuming image processing algorithms. It is shown how to distribute the processes, by using a specialized **library**, namely PVM (parallel virtual machine). An example is given: the LBG algorithm for codebooks optimization has been revisited in order to distribute efficiently the process. A major point has been to minimize the required communication bandwidth between the **processors**. Some adaptations are proposed in **order** to synchronize **processors** with different speeds (load balancing) better. An implementation giving to the process robustness against failures is also described.

...Descriptors: **local area networks** ;

...Identifiers: **specialized library** ;

10/3,K/6 (Item 6 from file: 2)

DIALOG(R)File 2:INSPEC

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04064281 INSPEC Abstract Number: B9202-6210L-344, C9202-5620L-128

**Title: LAN interconnect using X.25 network services**

Author(s): Barrett, J.J.; Wunderlich, E.F.

Author Affiliation: AT&T Bell Lab., Holmdel, NJ, USA

Journal: IEEE Network vol.5, no.5 p.12-16

Publication Date: Sept. 1991 Country of Publication: USA

CODEN: IENEET ISSN: 0890-8044

U.S. Copyright Clearance Center Code: 0890-8044/91/0900-0012\$01.00

Language: English

**Title: LAN interconnect using X.25 network services**

Abstract: The use of X.25 for medium-speed applications (<56 kb/s) in personal computer **local area networks** (LANs) is considered, focusing on a number of popular **LAN**-based applications that are appropriately matched for X.25 services. For architectural reasons, they are broadly classified into two **categories**: PC-to-host access (**terminal** emulation), as in token ring, to synchronous data **link** control (SDLC) hosts using host gateways; and client-server applications, such as distributed **databases** that are bridged or routed. For each class of applications, the traffic characteristics are discussed, it is explained how an efficient interconnection can be accomplished, and some insight is provided into how **LAN** internetworking devices (routers and gateways) function in an X.25 environment.

Descriptors: **local area networks** ;

...Identifiers: **local area networks** ; ...

...**LAN** internetworking devices

10/3,K/7 (Item 7 from file: 2)

DIALOG(R)File 2:INSPEC

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02877010 INSPEC Abstract Number: C87027903

**Title: The challenge of integrating hierarchical control across distributed processors on a plant-wide network**

Author(s): Metzger, D.P.; McCarthy, J.J.

Author Affiliation: Honeywell Inc., Phoenix, AZ, USA

Conference Title: Advanced Control Techniques Move from Theory to Practice. Techniques that have Made it. Proceedings of the Twelfth Annual Advanced Control Conference p.137-43

Editor(s): Morris, H.M.; Kompass, E.J.; Williams, T.J.

Publisher: Control Engineering, Barrington, IL, USA

Publication Date: 1986 Country of Publication: USA 166 pp.

ISBN: 0 931682 22 3

Conference Sponsor: Purdue Univ.; Control Eng

Conference Date: 15-17 Sept. 1986 Conference Location: West Lafayette, IN, USA

Language: English

**Title: The challenge of integrating hierarchical control across distributed processors on a plant-wide network**

Abstract: With the advent of plant-wide networks and **database** integration, the extension of process control strategies into the higher levels of the plant processing hierarchy approaches full realization. The **linking** of control processors distributed across high speed local networks with microprocessor-based loop processors at the sensor level raises new considerations for architectural design tradeoffs...

...Descriptors: **local area networks** ;

...Identifiers: **local area networks** ; ...

...**database** integration

10/3,K/8 (Item 1 from file: 6)  
DIALOG(R)File 6:NTIS  
Comp&distr 1998 NTIS, Intl Copyright All Righ. All rts. reserv.

1960454 NTIS Accession Number: AD-A307 821/9

**Indexing and Retrieval in Digital Libraries. Developing Taxonomies for a Repository of Decision Technologies**

(Master's thesis)

Rogers, P. M.

Naval Postgraduate School, Monterey, CA.

Corp. Source Codes: 019895000; 251450

Mar 96 70p

Languages: English Document Type: Thesis

Journal Announcement: GRAI9619

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NTIS Prices: PC A05/MF A01

DecisionNet is an online **Internet** -based repository of decision technologies. It **links** remote users with these technologies and provides a directory service to enable search and selection of suitable technologies. This thesis develops classification methods to enable...

... for software and other online repositories are examined. Criteria and principles for a good taxonomy are established and systematically applied to develop DecisionNet taxonomies. A **database** design is developed to store the taxonomies and to classify the technologies in the repository. User interface issues for navigation of a hierarchical classification system are discussed. A user interface for remote **World Wide Web** users is developed. This user interface is designed for browsing the taxonomy structure and creating search parameters online. Recommendations for the implementation of a repository...

Descriptors: Digital systems; \*Information retrieval; \*Classification; \*Online systems; **Data bases**; Algorithms; Interfaces; Parameters; Theses; Searching; User needs; Storage; **Hierarchies**; Remote **terminals**

10/3,K/9 (Item 1 from file: 108)  
DIALOG(R)File 108:Aerospace Database  
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02288316 N96-35727

**Medical Image Database Access Via Satellite (MIDAS)**

LONG, L. RODNEY; THOMA, GEORGE R.; et al.

National Library of Medicine, Bethesda, MD.

CORPORATE CODE: NJ578842

In National Library of Medicine, Advanced Communication Technology Satellite Results Conference p (SEE N96-35699 12-32)

May 1996

**Medical Image Database Access Via Satellite (MIDAS)**

The Communications Engineering Branch of the National **Library** of Medicine (NLM) has planned very small aperture **terminal** (VSAT) and high data **rate** (HDR) experiments using the Advanced Communications technology Satellite (ACTS) communications technology...

...Experiments are planned to assess new methods for improving transmission control protocol/**internet** protocol (TCP/IP) performance, and in using the satellite **link** as a method to deliver medical **database** information, consisting of both text and image data...

10/3,K/10 (Item 1 from file: 233)  
DIALOG(R)File 233:Microcomputer Abstracts  
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00420667 96CB04-007

LANs, WANs, CD-ROMs, and networking -- The idea of a CD network was to allow us to network CD-ROMs not only at the local library but also in branch libraries

Schuyler, Michael

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Company Name: Logicaft

Product Name: OmniWare

LANs, WANs, CD-ROMs, and networking -- The idea of a CD network was to allow us to network CD-ROMs not only at the local library but also in branch libraries

...concentrating on the Windows side of search engines. Indicates that a CD network was designed to let users network CD-ROMs both at the local library and in branch libraries, and they are **connected** to the central library via frame relay on 56K lines. Attention is given to Logicaft's OmniWare product, consisting of both hardware and software components, which enables you to access CD-ROMs by telnet-ing into them using the **Internet** . Recommends that the method of getting data to OPAC **terminals** must change in **order** to be able to place CD-ROMs on a WAN with **Internet** protocols, although networking CD-ROMs with Novell is a straightforward procedure. (jo)

Descriptors: **Local Area Networks** ; **CD-ROM**; **Library** ; **Wide Area Networks**; **Networks**

10/3,K/11 (Item 1 from file: 103)

DIALOG(R)File 103:Energy SciTec

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**Title: Group communication in bus-based computer networks**

Author(s)/Editor(s): McKinley, P.K.

Corporate Source: Illinois Univ., Urbana, IL (USA)

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Language: In English

**Abstract:** In recent years, there has been an increase in the number of group-based applications composed of cooperative processing entities. Examples include multimedia teleconferencing, distributed **databases** , distributed operating system services, cooperating processes in automated control, and parallel processing. The communication among processes in group-based applications typically involves multiple destinations and...

...temporally local. An increasing number of networks are composed of multiple-access media, or buses. A bus-based network is one in which every communication **link** is a multiple-access medium. Examples of bus-based networks are found in many types of computer networks, including metropolitan area networks, interconnected **local area networks** , multichannel **local area networks** , and interconnection networks for parallel processors. This thesis addresses the problem of supporting group communication in bus-based computer networks. The work presented in the...

...two related parts. The first part addresses the problem of constructing multicast trees in bus-based networks. A multicast tree is a collection of communication **links** spanning the processors on which process group members reside. Messages entering the tree from one group member are routed and copied as necessary by intermediate **nodes** in **order** to be delivered to every group member. Because of the multiple-access property of the media, the problem of constructing multicast trees in bus-based...

10/3,K/12 (Item 1 from file: 370)

DIALOG(R)File 370:Science

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00500562 (USE 9 FOR FULLTEXT)

**Mapping the Protein Universe**

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Science Vol. 273 5275 pp. 595

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Document Type: Journal ISSN: 0036-8075

Language: English

Section Heading: Articles

Word Count: 6817

(THIS IS THE FULLTEXT)

...Abstract: to discover unexpected evolutionary relations, reaching back billions of years, between protein molecules. Protein shape comparison also improves tools for identifying gene functions in genome **databases** by defining the essential sequence-structure features of a protein family. Finally, an exhaustive all-on-all shape comparison provides a map of physical attractor...

...Text: This exploitation of evolutionary **connectivity** has become possible because of a wealth of molecular data about proteins from many different species. To date, biologists have read the complete nucleotide (and...

...Comparison by Sequence or by Shape? Exploiting the observation of evolutionary **connections** between proteins in order to predict some aspects of structure or function is simple in principle. If a protein is found to be evolutionarily related...

...from that of the other, with varying degrees of accuracy, depending on the evolutionary distance between them. The question then arises as to how evolutionary **connections** are best detected: by amino acid sequence comparison in 1D or by shape comparison in 3D...Searching 3D **Databases** Beyond comparing two proteins, researchers also want to place new protein structures relative to the universe of all protein shapes, or at least relative to all known protein structures. This task is similar to that of finding a match to a fingerprint in a **database**, but more complicated in that similarities, and not just identities, are of interest. In particular, for a protein structure used as a query, researchers want...

...that score above some similarity threshold (for example, such as a threshold defined in terms of statistical significance). Our strategy for efficient searches in the **database** of 3D structures (B2) is to first scan for obvious similarities using fast (but, in general, less accurate) procedures and then to rescan for more...

...similar in shape. The algorithm works by storing, in a way convenient for geometrical lookup, a list of spatial relations between such vectors taken from **database** proteins (B8). Here, lookup (or "hashing") is conceptually similar to looking up names in a telephone book. The lookup procedure matches the vector relations taken...

...in the stored list and proceeds to sample a limited set of spatial superimpositions whenever enough matches are found between the query protein and a **database** protein. Finally, a dynamic programming step refines these superimpositions and generates detailed residue-level alignments. The search of one structure against the structure **database** of several thousand structures typically takes only about 5 min on a computer workstation. Other simplified methods achieve similar speed (B7). In this way, a...corresponds to the exact global optimum of the objective function (Fig. 3B). Continuing the procedure past the global optimum yields suboptimal solutions in monotonically decreasing **order**. Our adaptation of this **branch**-and-bound procedure replaces the sequence of protein A by the trace of residue centers of protein A and thus tests all residue-segment pairings...



...For reasons of efficiency, we couple this **branch** -and-bound algorithm to the **hierarchical** decomposition of a full structure into smaller compact units [similar to "folding unit" decomposition or "domain" decomposition (B11) ]; that is, we perform the comparison in...

...residues in protein A onto segments in protein B are pruned before they are examined explicitly. For example, comparing the structures of transducin-a [Protein **Data Bank** code 1tag, 16 segments (B12) ] with that of Ras p21 [5p21, 166 residues (B13) ] leads to a nominal search of 10.sup(35) spatial arrangements...

...The **database** search methodology containing these two algorithms, plus other tools, is made available over the **Internet** to users with a coordinate data set describing a 3D protein structure in hand (B14) . The searches aim to address questions such as which known...

...efficient algorithms of shape comparison and their implementation in computer programs are crucial for coping with the currently more than 4000 structures in the Protein **Data Bank** (B2) . Currently, **Internet** servers rather than printed publications are the preferred medium of dissemination (B16) . We have recently used shape comparison algorithms to perform an exhaustive all-on...

...overview of the currently known parts of the protein universe and, if possible, to arrive at a classification of architectural types. In processing the current **database** , two problems arise, one technical and the other conceptual in nature...

...these have essentially complete structural overlap and in most cases similar function (B17) . Removing such sequence redundancy from the April 1996 release of the Protein **Data Bank** leaves a set of 740 representative proteins of known structure. Many pairs in this set are still structurally similar to each other, in spite of...large units and (ii) of a physical decomposition of protein structure into a tree of putative folding units at all size levels (B18) . Given a **database** of protein shapes, pairwise structural similarities, and alternative decompositions into substructures, the notion of maximal recurrence is implemented by selection of a set of substructures for which the sum of similarities is maximized across the **database** . As a result, the 740 proteins with unique sequences are split into 1048 domains...

...in our opinion, ideal. We chose to group domains similar in shape into "domain fold" classes or simply "fold" classes by a process of average **linkage** clustering (B19) . Disregarding small, irregular domains and terminating clustering at an empirically chosen cutoff in similarity, the result is a set of fold classes whose...

...continuously monitor the rise in structural knowledge in terms of the appearance of new entries, new protein families, and new fold classes in the Protein **Data Bank** (B2) ...Simple extrapolation leads us to expect 10,000 **database** entries, 1600 sequence-unique representative structures (sequence families), and 400 fold classes by the end of 1997. If current trends continue exponentially and without saturation...

...dominated by five densely populated regions, which we call attractors (Fig. 5 ). Although the current distribution of folds is the result of several effects, including **database** bias, we put forward the hypothesis that these attractors represent both dominant folding pathways and evolutionary sinks that are the result of physical constraints...in the 2D projection of shape space (Fig. 5A) contain domains with similar secondary structure composition and characteristic topological motifs (secondary structure elements plus loop **connections** ). In the folded structures, the shared motifs are not exposed to solvent, so they are likely to form early on in the folding process and...

...Discovering Evolutionary **Links** As more protein structures are determined, the placement of each new protein in shape space makes a contribution to the completion of the map and...

...substructure, but also a sequence signature pattern that maps to the nucleoside triphosphate binding site in the conserved domains (Fig. 5). Pattern searches in sequence **databases** led to the identification of five additional families of nucleotidyltransferases that are predicted to contain the same substructure responsible for the nucleotide transfer reaction, which...

...Most evolutionary **links** are identified on the basis of sequence similarity, but the most interesting new discoveries are the result of explorations in the "twilight zone" of sequence...

...The procedure has these steps: structural alignment in 3D of two or more known structures, definition of the pattern of conserved residues in 3D, sequence **database** searches using that pattern to identify additional candidates, multiple sequence alignment in each candidate family to check consistency of conservation of the search pattern, building...Figure F1  
Caption: Protein architecture. The tramtrack protein [Protein **Data Bank** entry 2drp (B30) ] is a small protein (525 heavy atoms, 63 residues, and 6 elements of secondary structure), yet it exhibits typical modular protein architecture...

...alignment of amino acid sequences. Here, the comparison of the tramtrack protein with another zinc finger protein, the human enhancer-binding protein MBP-1 [Protein **Data Bank** entry 1bbo (B32) ], is used as an example. (A) In the 3D comparison, the problem is to find a translation and rotation of one molecule (red: 1bbo) onto the other (blue: 2drpA). The 3D superimposition (residue centers only, green lines **join** equivalenced residue centers, zinc atoms as spheres) is not exact because of an internal rotation of the two zinc finger domains relative to one another...best match of residues in protein B onto a predefined set of residues in protein A (the match is illustrated by the circle-ended line **connecting** the single square in matrix A with a set of candidate squares in matrix B). The best match is the one with the maximal pair...

...terms of these domains (within the limits of similarity within a domain class). Domains ranked about 170 or higher occur only once in the current **database** (singlets). (B) Examples of frequently observed fold classes, with one class from each of the attractor regions in Fig. 5 (each attractor region contains several...region are not shown, but the most frequently occurring are shown in Fig. 5B. (C) Growth and redundancy of protein 3D structures in the Protein **Data Bank** (B2) . Entry: one of currently more than 4000 sets of protein coordinates in the PDB. Family: collection of proteins set as equivalent if pairwise sequence...

...domains (protein substructures) are covered by 16 fold classes (shown as topology diagrams; a, a helix segment; (beta) , (beta) strand segment; thick bar, parallel chain **connection** between segments; thin bars, antiparallel **connection** ; arc, a helices crossing at roughly right angles). Although each fold class has individual features, most fold classes map to five attractor regions (peaks I...

...unit has a preferred handedness determined by polymer physics and the natural twist of (beta) strands. Attractor II contains a variety of helical folds. The **connectivity** of elements in the folds of attractors III and IV contains meander motifs suggestive of the collapse of a long hairpin, either of (beta) strands...

...alternating with a helical pair, ( (beta) a (beta) ).inf(2) (B36) . The (beta) zigzag motif of attractor V is simply a series of antiparallel hairpin **connections** between sequentially adjacent strands. Elementary polymer physics indicates that interactions in space between regions of the chain that are close in sequence are much more...

...about 13 in porin barrels). Fold classes other than the most populated 16 are not shown but are accessible from the Dali service over the **Internet** (B16...

...Figure Removed  
Removed

#### Figure F6

Caption: Evolutionary adaptation of enzyme function. (A) Discovery of an essential structure-function feature by shape comparison. A structure **database** search with DNA polymerase (beta) detects kanamycin nucleotidyltransferase (rather than other known DNA or RNA polymerases) as the nearest neighbor in fold space and reveals conserved residues and structural features supporting the active site. Following up the lead provided by structure **database** searching with profile searches in sequence **databases** resulted in the identification of the same characteristics in a large superfamily of nucleotidyltransferases. The biological functions of member families range from DNA repair to...

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- ...data sets are accessible at [www.pdb.bnl.gov](http://www.pdb.bnl.gov). The Protein Data Bank was founded in 1972 as the global repository for macromolecular structure data...part of the query structure or asserts that no significant similarity has been found. Precalculated mutual similarities for all known protein structures in the Protein Data Bank (B2) are also available from <http://www.embl-heidelberg.de/dali> and can be viewed as alignments or as 3D views with the use of a Web browser...16. These servers provide Internet access to catalogs of protein 3D structures: Protein Data Bank (<http://www.pdb.bnl.gov>), Dali (<http://www.embl-heidelberg.de/dali>), Scop (<http://scop.mrc-lmb.cam.ac.uk/scop/>), and CATH (<http://www...>)
- ...18. The mean and standard deviations of similarity scores were calibrated against pairwise all-on-all comparisons in a **database** of 220 proteins, as a function of protein size. Shape similarity quantified with the distance matrix comparison scores (B6) can then be expressed in terms...
- ...19. Average linkage clustering assumes that one knows all pairwise similarity scores and proceeds iteratively by grouping the two most similar domains in the set into a class<sup>37</sup>. The most recent fold classes among newly determined protein structures as detected by the Dali search system are on Internet under <http://www.embl-ebi.ac.uk/dali/newfold/> (for a period of 1 year after publication of this issue). We thank R. Schneider, M...

=> s linked database#

```
      148011 LINKED
      20312 DATABASE#
L1      43 LINKED DATABASE#
      (LINKED(W) DATABASE#)
```

=> s l1 (p) node#

```
      67342 NODE#
L2      1 L1 (P) NODE#
```

=> d l1 1-

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=> s rank?(3a)node#(p)database#

17527 RANK?

67342 NODE#

20312 DATABASE#

L3 4 RANK?(3A)NODE#(P)DATABASE#

=> d 1-

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=> s rank?(3w)node#(p)database#

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17527 RANK?
67342 NODE#
20312 DATABASE#
L4      3 RANK?(3W)NODE#(P)DATABASE#

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=> d 1-

1. 5,887,058, Mar. 23, 1999, Digit parsing for a flexible dial plan capability in a telecommunications switch; Ramesh Kammath, et al., 379/284, 268, 269, 424 [IMAGE AVAILABLE]
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=> s assign?(2w)rank(2w)node#

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289478 ASSIGN?
9499 RANK
67342 NODE#
L5      2 ASSIGN?(2W)RANK(2W)NODE#

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=> d 1-

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=> s assign?(2w)rank(p)database#

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289478 ASSIGN?
9499 RANK
20312 DATABASE#
L6      5 ASSIGN?(2W)RANK(P)DATABASE#

```

=> d 1-

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